

# The StriveTogether Data Maturity Model

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A COMPASS FOR BUILDING AND ADVANCING DATA  
INFRASTRUCTURE ACROSS COMMUNITY PARTNERS

**StriveTogether**  
Every child. Cradle to career.



**IMPACT LAB**



The Data Maturity Model is a tool that allows communities to evaluate their local environments against 14 aspects critical to a mature data infrastructure. This includes an assessment and categorization of not only technical maturation, but cultural and political dynamics that enable robust data sharing and use within a community. The tool should be considered a compass and can provide a framework for data conversations across community partners, leaders and members.

# Model Structure

The challenges communities in the StriveTogether Cradle to Career Network face can be organized in two overarching categories: Data Quality/Technological Capacity and Cultural and Socio-political Context. Each category has three sub-categories and several key aspects.

## Data Quality/Technological Capacity

Data quality and technology often vary widely across communities, districts and program providers. Three critical aspects of data quality and technological capacity include: Storage, Collection and Privacy.

CATEGORY	SUB-CATEGORY	ASPECTS
Data Quality/ Technological Capacity	Storage	Accessibility Medium Integration
	Collection	Relevancy Quality Granularity History
	Privacy	Documentation FERPA Interpretation

## STORAGE

Within the category of storage, maturation is based on accessibility (in a technical sense), the medium or format of the data and how well that data is integrated within a community context.

## COLLECTION

Collection processes are measured by the areas of relevance/sufficiency of data, quality (of the data set itself, i.e., missing data or errors), granularity and the availability of historical data.

## PRIVACY

Privacy is categorized into documentation and FERPA (Family Educational Rights and Privacy Act) interpretation. Notably, while there is a technical component to privacy, it is also critical to cultural and socio-political factors. Privacy is one of the main concerns that districts have when approached by organizations to begin data sharing arrangements; at the very least, it is a commonly cited excuse.



# Cultural and Socio-political Context

As the German author Thomas Mann once noted, “everything is politics.” This is particularly true in the sharing of data across organizations within a community, and consequently, the Data Maturity Model considers three cultural and socio-political components that contribute not only to a community’s data-sharing culture but its data maturity: Partnership Buy-in, Partner Buy-in and Transactional Factors.

CATEGORY	SUB-CATEGORY	ASPECTS
Cultural and Socio-political Context	Partnership Buy-in	Staff Leadership
	Partner Buy-in	Providers Districts Funders
	Transactional Factors	Data Use Policy People Resources

## **PARTNERSHIP BUY-IN**

A culture of sharing and basing decisions on data should start and be modeled within the partnership. Both leadership and staff buy-in should be considered and measured.

## **PARTNER BUY-IN**

In many communities, data is ultimately shared among districts and providers, so their buy-in, capacity and culture represent an important component of maturity. Similar to partnership buy-in, these aspects should be considered both at leadership and staff levels.

Funders also play an important role in the data maturity of a community. They often set what metrics are measured and incorporated into funding decisions and can provide funding to build data infrastructure.

## **TRANSACTIONAL FACTORS**

How data is shared and used ultimately depends on having appropriate data use policies in place and the staff needed to analyze and act upon data. These two transactional factors are the final components to the cultural and socio-political contexts of data maturity.

# How to Use the Data Maturity Model

Using the rubric descriptions, collective impact organizations and their partners should evaluate themselves and their community across each of the key aspects, from lagging to leading.

LAGGING

BASIC

ADVANCED

LEADING

By using the model, organizations and communities can assess and categorize their level of technical maturation and systematically maneuver within the complex political relationships that nearly every community in the StriveTogether Cradle to Career Network faces.

## IMPORTANT CONSIDERATIONS

While using this model, please keep the following considerations in mind:

- 1** Communities can lead in some aspects and lag in others. Generally, encouraging data usage across organizations to improve outcomes requires the right balance of technological capacity and a healthy cultural and political environment. However, it is not necessary to lead in all areas to successfully navigate and employ data.
- 2** Community data maturation is not necessarily linear. There is not a specific and cogent narrative for how communities mature. When looking across partnerships, however, some patterns do emerge, and the goal of the maturation model is to help partnerships identify a potential path forward.
- 3** The model is intended to be used as a compass and not a roadmap, pointing communities toward potential next steps in maturity across each aspect. Based on learning from other partnerships, the model acknowledges that each community has a unique history, political environment and set of natural strengths. Communities have different resources and contexts to work with: human capital, financial, technical, etc. As a result, what aspects should be prioritized are best guided by the goals and capacity of the partnership (and often can be mandated by external factors).

# Data Quality/ Technological Capacity

STORAGE				
AREA	LAGGING	BASIC	ADVANCED	LEADING
Accessibility	Only accessible within the application where data is collected	Accessible outside the application but in proprietary format; specialized analysis software required	All machine readable in standard open format (CSV, JSON, XML, database, etc.)	All machine readable in standard open format and available through an API
Medium	Paper	PDF/images, etc.	Text files	Database
Integration	Data exists in source systems	Data is exported occasionally and integrated ad hoc	Central data warehouse for internal data only	Central data warehouse with automatic/real-time aggregation and linking of both internal and external data
COLLECTION				
AREA	LAGGING	BASIC	ADVANCED	LEADING
Relevance/ Sufficiency	Data is irrelevant to student outcomes or continuous improvement	Data is relevant but insufficient due to missing fields or lack of access from the district	Data is relevant for some audiences and aids programmatic decision-making	Data is complete and relevant to meet practitioner, leader and funder requirements, and informs programmatic changes and improvement
Quality	Missing rows	Missing variables	No missing data, but contain errors	No missing data and no errors
Granularity	Community level (multiple districts)	District level	School/provider level	Student level
History	No history exists — old data is deleted or unknown	Historical data is stored, but updates overwrite existing data	Historical data is stored in outdated schemas; new data appended with timestamp	All history kept; new data schema is mapped to old schema for fluent use

# Data Quality/ Technological Capacity CONTINUED

PRIVACY				
AREA	LAGGING	BASIC	ADVANCED	LEADING
Documentation	No MOU or data-sharing agreements exist between any parties	Few MOU or data-sharing agreements exist among the backbone organization and districts or partners	MOU and data-sharing agreements are common among backbone, district, OR partners	MOU and data-sharing agreements exist and accurately reflect the timely flow of data among backbone, districts and partners
FERPA Interpretation	FERPA is used as an excuse to not engage in data-sharing conversations	FERPA is interpreted strictly; it is at the center of conversations with districts	There are acknowledged ways to share data while interpreting FERPA	FERPA is well understood and technology is leveraged to maintain FERPA requirements and privacy policies for all parties while not restricting data sharing

# Cultural and Socio-political Context

PARTNERSHIP BUY-IN				
AREA	LAGGING	BASIC	ADVANCED	LEADING
Staff Buy-in	Staff is aware that data exists but largely does not value it or use it	Staff has a deep understanding of available data and uses data occasionally	Staff regularly uses data at the organizational level for continuous improvement	There is a robust culture of data among staff; data is demanded to justify all programmatic decisions
Leadership Buy-in	Leadership does not understand how better data might advance the organization	Leadership values data but does not have a clear path to use it regularly	Leadership understands how data can be used to drive decisions beyond justification for funding	Leadership develops a culture of data within the organization that demands data for programmatic decisions; leadership is also a convincing advocate for a culture of data sharing in the community
PARTNER BUY-IN				
AREA	LAGGING	BASIC	ADVANCED	LEADING
Provider/District Leadership Buy-in	Leadership does not understand how using or sharing data might advance the organization	Leadership values data but does not have a clear path to use it regularly	Leadership understands how data can be used to drive decisions beyond justification for funding	Leadership develops a culture of data within the organization that demands data for programmatic decisions
Provider/District Staff Buy-in	Staff on the ground rarely provides data; data is seen as a hindrance to their “real job”	Staff on the ground provide data because it is a requirement	Staff on the ground provide data regularly; staff access and use data for organizational insights	Staff on the ground provides and uses data in real time, makes decisions based on the data and offers suggestions on what is being collected and what information would better inform their own effectiveness
Funder Buy-in	Funders only require vanity metrics and narratives	Funders ask for key performance indicators	Funders ask for key performance metrics and provide funding for data infrastructure	Funders require data-driven decision-making and provide funding for data infrastructure, maintenance and usage

# Cultural and Socio-political Context CONTINUED

TRANSACTIONAL FACTORS				
AREA	LAGGING	BASIC	ADVANCED	LEADING
Data Use Policy	<p>No policies exist around use, transfer and sharing of data</p> <p>No partnerships exist with external organizations</p>	<p>Organization has policies in place for the use, transfer and sharing of data</p> <p>Formal documentation of partnerships with external organizations exists, but data is not shared</p>	<p>Organization has policies in place for the use, transfer and sharing of data between staff and leadership. Data-sharing agreements are in place; data is shared through a manual process</p>	<p>Organization has policies in place for the use, transfer and sharing of data between all staff and all partners/districts. Robust data-sharing agreements are in place and systems are in place for real-time data sharing</p>
People Resources	<p>Community stakeholders maintain siloed data</p>	<p>Organization knows that data can help, what data it needs and has access but lack the in-house skills to make data meaningful or actionable</p>	<p>Organization knows that data can help, what data it needs and has access and talent in place, but lacks the infrastructure to efficiently make data relevant to stakeholders</p>	<p>Organization has dedicated staff who have success to student-level data and technical capacity to make data actionable; data set is strengthened by significant community participation and data input</p>

# StriveTogether

Every child. Cradle to career.

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StriveTogether is a national nonprofit working to improve education for every child. We help a network of more than 70 communities across the country focus efforts and get better results for six cradle-to-career goals. We coach and connect partners to solve problems with data; use a rigorous approach to define and measure progress; and push people on changing behavior to create lasting change. Communities using our approach have seen measurable gains in kindergarten readiness, academic achievement and postsecondary success. The StriveTogether Cradle to Career Network reaches 8.2 million students, involves 10,800 organizations and has partners in 32 states and Washington, D.C. Visit [www.strivetgether.org](http://www.strivetgether.org).



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The Impact Lab is a data science company that works with nonprofits, philanthropies and governments to build tools that improve their impact. They have worked on projects around the world in education, workforce development, social service delivery and more. Founders Andrew Means, Matt Gee and Tom Plagge are frequent speakers and thought leaders on issues of data science, technology and impact.

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