

Data Matters Framework

The Data Matters Framework outlines a set of critical components that schools must have in place to meaningfully engage in data reflection and learning. These are the building blocks for data use in schools — the capacities and structures that educators need to effectively use data to advance learning and practice.

We offer this framework as a tool that educators and school-based staff can use to strengthen their data use practices. We also offer this as a tool for evaluators who are working with schools and looking for language that can support discussions with clients by illuminating what we mean — specifically and on the ground — when we talk about data use.

What does it mean to use data in the service of student learning?

First, we need to think about the *data cycle* — the process of transforming raw data into knowledge that leads to informed action. Numbers can only lead to actionable changes that support student learning when schools engage in the five phases of the cycle. (Figure 1)

How can we best set up schools to implement effective data cycles?

The Data Matters Framework identifies the key components of effective data use — these are the **conditions under which schools are able to implement effective data cycles**. The underlying theory of this framework is that in order for schools to integrate effective data cycles into their everyday operations and approach to learning, they must have support at the organizational and practical levels. (Figure 2)

This framework is the result of research conducted by Learning for Action for the Marin Community Foundation's Early School Success grant, and it draws upon existing frameworks in the literature as well as learnings from schools and other key stakeholders in Marin.



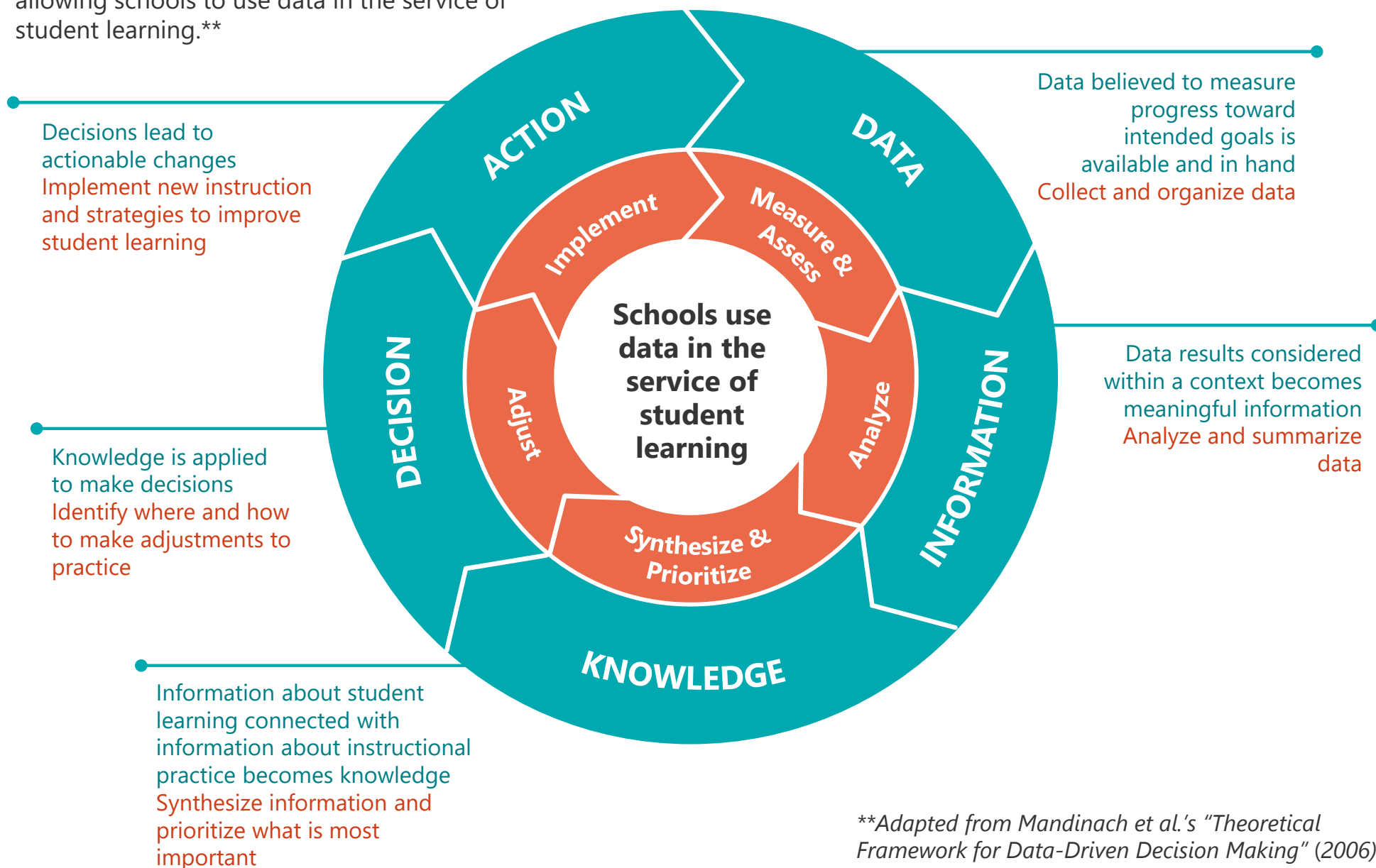
LEARNING *for* ACTION

Figure 1.

The Five Phases of an Effective Data Cycle

Effective data cycles transform raw data into knowledge that leads to informed action, allowing schools to use data in the service of student learning.**

➤ **Conceptual phases of the data cycle**
➤ **Practical phases of the data cycle**

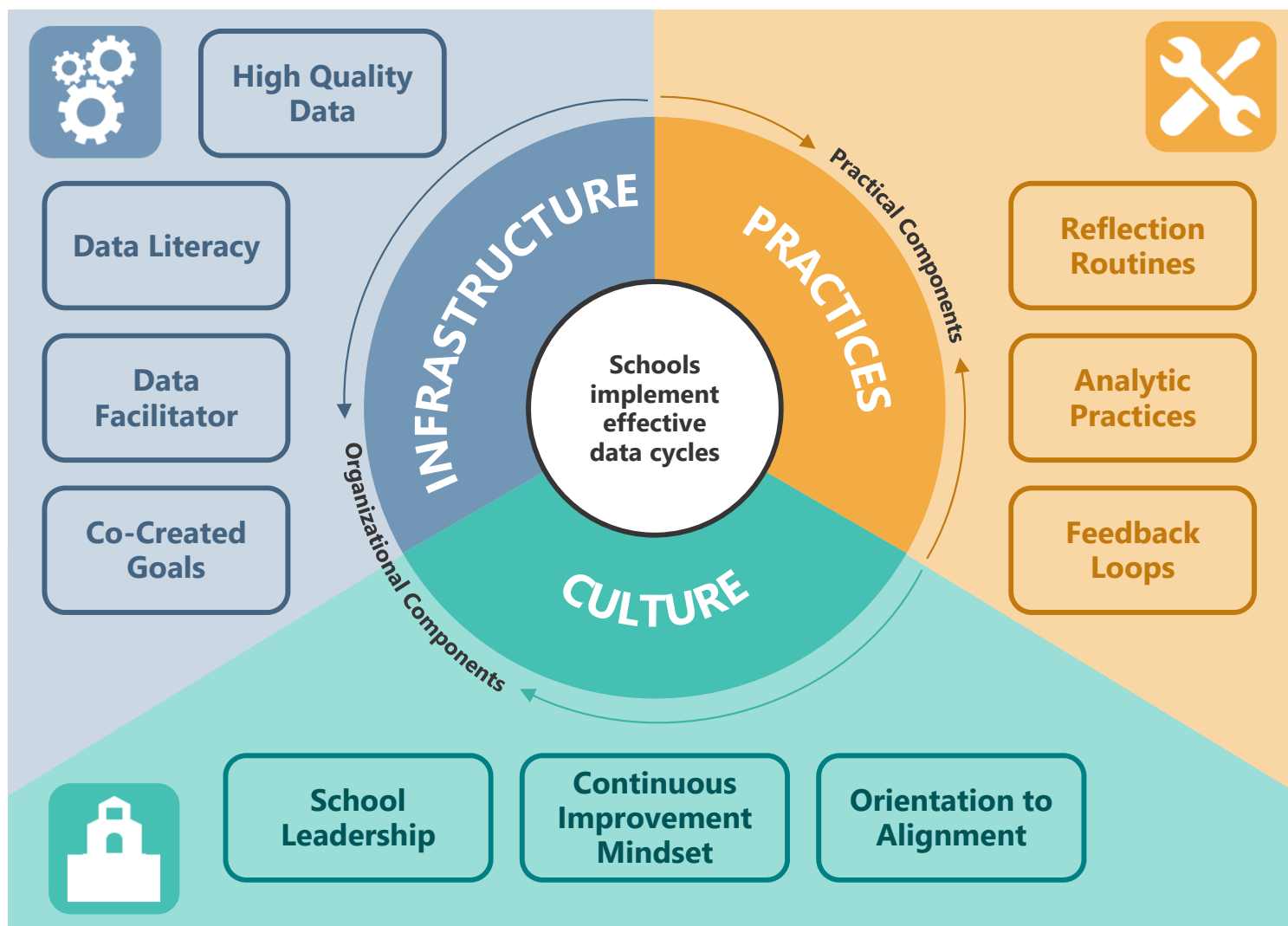


**Adapted from Mandinach et al.'s "Theoretical Framework for Data-Driven Decision Making" (2006)

Figure 2.

Conditions Under Which Schools Can Implement Effective Data Cycles

For schools to integrate effective data cycles into their everyday operations and learning approach, there must be support at the organizational (**culture** and **infrastructure**) and practical (**specific practices**) levels. At each level, there are **critical components** that, when in place, allow for schools to use data in the service of student learning. We provide high-level definitions of each component in the following pages.





ORGANIZATIONAL COMPONENTS: **Culture**

These are the organizational components that build a **CULTURE** that supports and promotes the power of data in the decision-making process.

School Leadership

School leadership cultivates a culture of data use by **setting transparent expectations** about data, providing **access** to data, **modeling** good data use, and **allowing time and space** for staff to engage with data.

Continuous Improvement Mindset

School staff embrace data as a tool when there is a schoolwide orientation towards **learning**, **continuous improvement**, and **collaborative inquiry**.

Orientation to Alignment

An orientation to alignment supports the use of data as a **collaborative, communications tool**.



ORGANIZATIONAL COMPONENTS:

Infrastructure

These are the organizational components of an **INFRASTRUCTURE** that support data use practices, ensuring teams have access and capacity to use data to improve instruction.

High Quality Data

Data must be **relevant**, **complete**, **secure**, and **actionable** in order to inform changes to practice.

Data Literacy

Educators must be confident in their **knowledge and skills of data analysis** and **interpretation** if they are to use data for decision-making purposes.

Data Facilitator

A data facilitator provides staff with **access** to data, processes to guide **reflection**, guidance in **interpreting results**, and **accountability** to act on the data findings.

Co-Created Goals

Schoolwide goals, co-created among staff, support the data cycle process by helping staff members **collectively examine data**, **identify areas for growth**, and **agree upon goals**.



PRACTICAL COMPONENTS:

Practices

These are the critical **PRACTICES** that, when in place, allow schools to engage in effective data cycles.

Reflection Routines

The routines that schools put in place to **regularly reflect on data** in order to make adjustments and appropriately respond to students' needs.

Analytic Practices

The actions that teams collectively and collaboratively engage in to **examine data**.

Feedback Loops

The process of **sharing data** with those who need to see it, ensuring decisions based on data lead directly to improved student outcomes.