USING DATA TO INFORM YOUR PROGRAM AND STATE REPORTING

EARLY COLLEGE SPRING SUMMIT

APRIL 14, 2021

HOST: WILLIAM HAYES, EdD

TIME: 8:30 - 9:50AM

ELEMENTARY AND SECONDARY EDUCATION

MASSACHUSETTS Department of Higher Education

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FACILITATOR

DR. WILLIAM HAYES

➤ Current Principal of Mastery High School of Camden, NJ

Massachusetts Connection
➤ Former teacher and assistant principal of New Mission High School in Boston, MA

➤ Graduate of Harvard Graduate School of Education '08.

➤ Former resident of Roxbury, Dorchester, and Medford, MA.

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AGENDA

- Frame the discussion for the day
- Preview the MA Early College Dashboard
- Introduce a framework for collecting, analyzing, and responding to data.
- Review available resources for school-based data analysis
- Review a tool for school-based data reflection.

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Framing the Discussion

Data is a gift-wrapped mirror that we open with curiosity, nervousness, and excitement . It merely reflects back to us what is able to be seen. How the image came to be, how you feel about it, and what you plan to do after seeing it is up to you. - W. Hayes

Data allows us too….

Answer relevant questions
Evaluate progress toward goals
Identify disparities and inequities
Develop hypotheses about what has happened
Make predictions about what will happen
Make decisions to impact future data

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Preview of the Early College Dashboard

Pierre Lucien, Policy Analyst

Discussion Question: *In the public chat box* type something you heard or saw that excites you about the potential use of the Early College Dashboard.
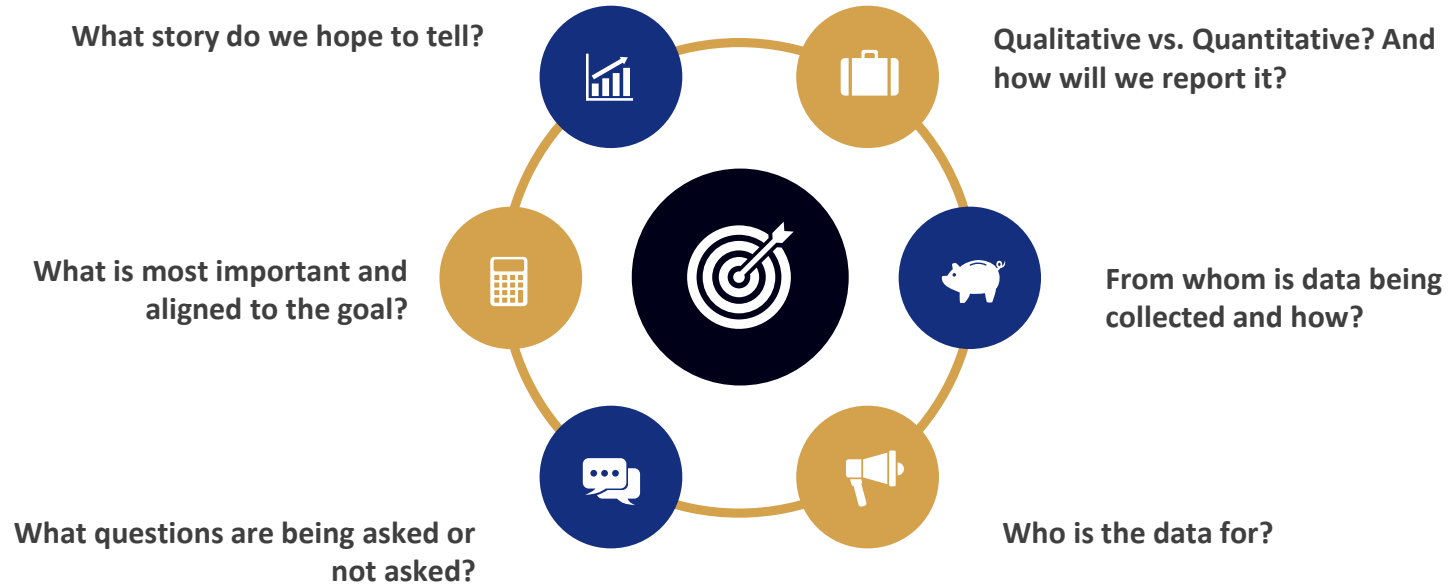
Using Data to Make and Tell a Story
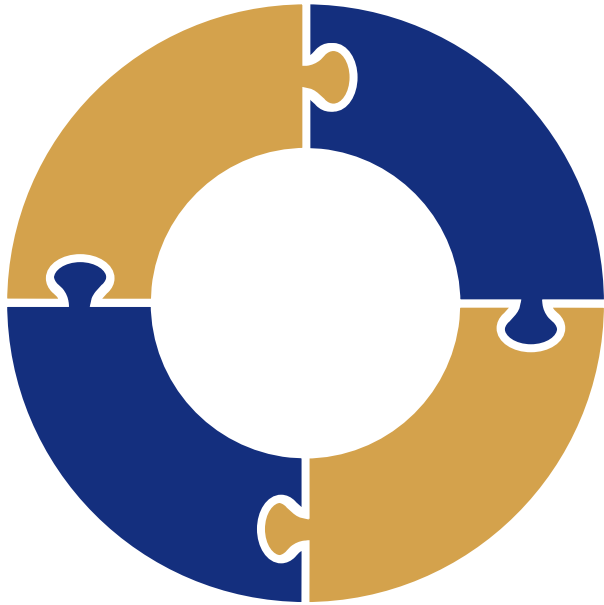
Traditional View of DDI Framework

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Considerations in Data Collection

What story do we hope to tell?

Qualitative vs. Quantitative? And how will we report it?

What is most important and aligned to the goal?

From whom is data being collected and how?

What questions are being asked or not asked?

Who is the data for?

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Considerations in Data Analysis

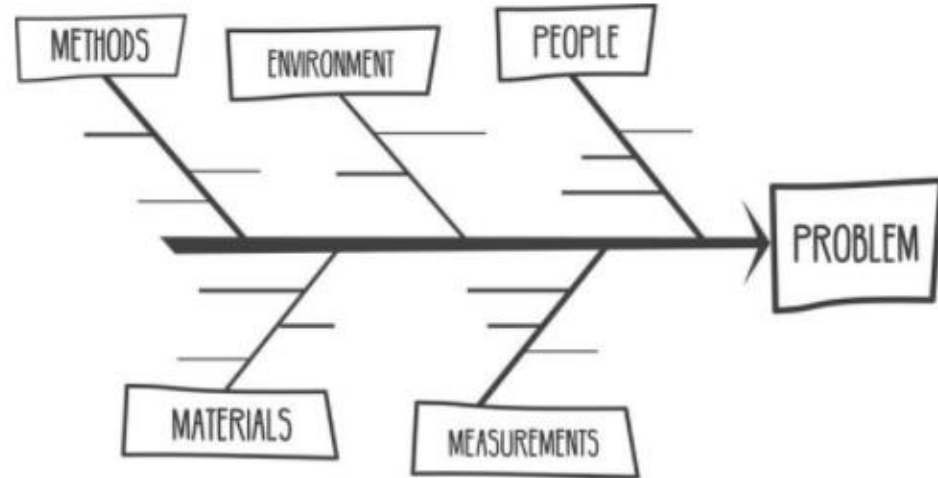Analysis is as limited as the views, skills, and perceptions of the people doing the analysis

Correlation does not mean causation

Programmatic data analysis is complex and comprehensive

Sometimes the data tells us we don't have enough to draw a conclusion.

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Using the Root Cause Analysis to Develop a Plan

Root cause analysis is a **structured team process** that assists in identifying underlying **factors or causes** of an outcome. A cause and effect diagram, often called a "fishbone" diagram, can help in brainstorming to identify possible causes of a problem and in **sorting ideas into useful categories**. A fishbone diagram is a visual way to look at cause and effect.

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Fishbone Analysis

1

Agree on the problem statement (also referred to as the effect). This is written at the mouth of the "fish." Be as clear and specific as you can about the problem. Beware of defining the problem in terms of a solution (e.g., we need more of something).
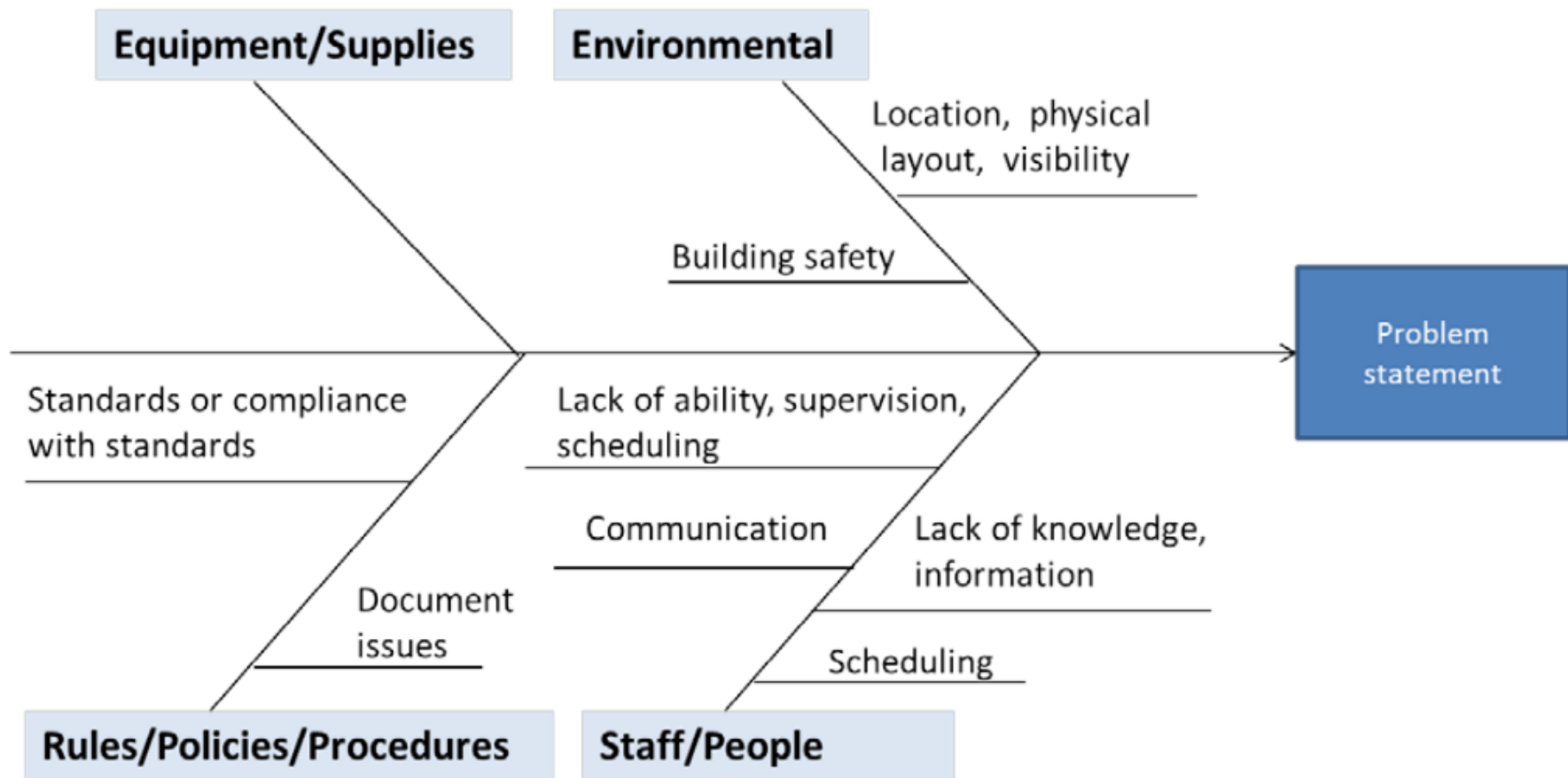
2

Agree on the major categories of causes of the problem (written as branches from the main arrow). Major categories often include: equipment or supply factors, environmental factors, rules/policy/procedure factors, and people/staff factors.

3

Brainstorm all the possible causes of the problem. Ask "Why does this happen?" As each idea is given, the facilitator writes the causal factor as a branch from the appropriate category (places it on the fishbone diagram). Causes can be written in several places if they relate to several categories.

4

Again asks "Why does this happen?" about each cause. Write sub-causes branching off the cause branches.

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Problem Statement

At High School A The application pool for Early College Programming does not include a high number of students from low income backgrounds.

Faculty/Staff
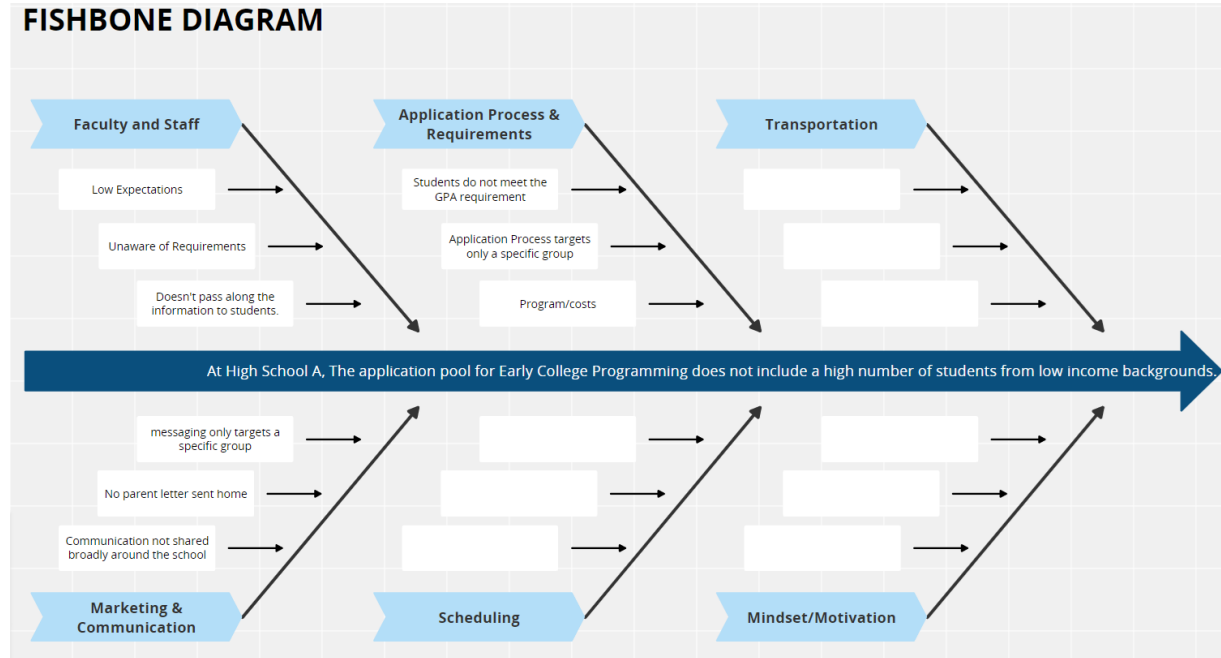
Application Process/Requirements

Marketing/Communication

Developing Your Own Fishbone Analysis Tool

FISHBONE DIAGRAM

Faculty and Staff
- Low Expectations
- Unaware of Requirements
- Doesn't pass along the information to students.

Application Process & Requirements
- Students do not meet the GPA requirement
- Application Process targets only a specific group
- Program/costs

Transportation

At High School A, The application pool for Early College Programming does not include a high number of students from low income backgrounds.

Marketing & Communication
- messaging only targets a specific group
- No parent letter sent home
- Communication not shared broadly around the school

Scheduling

Mindset/Motivation

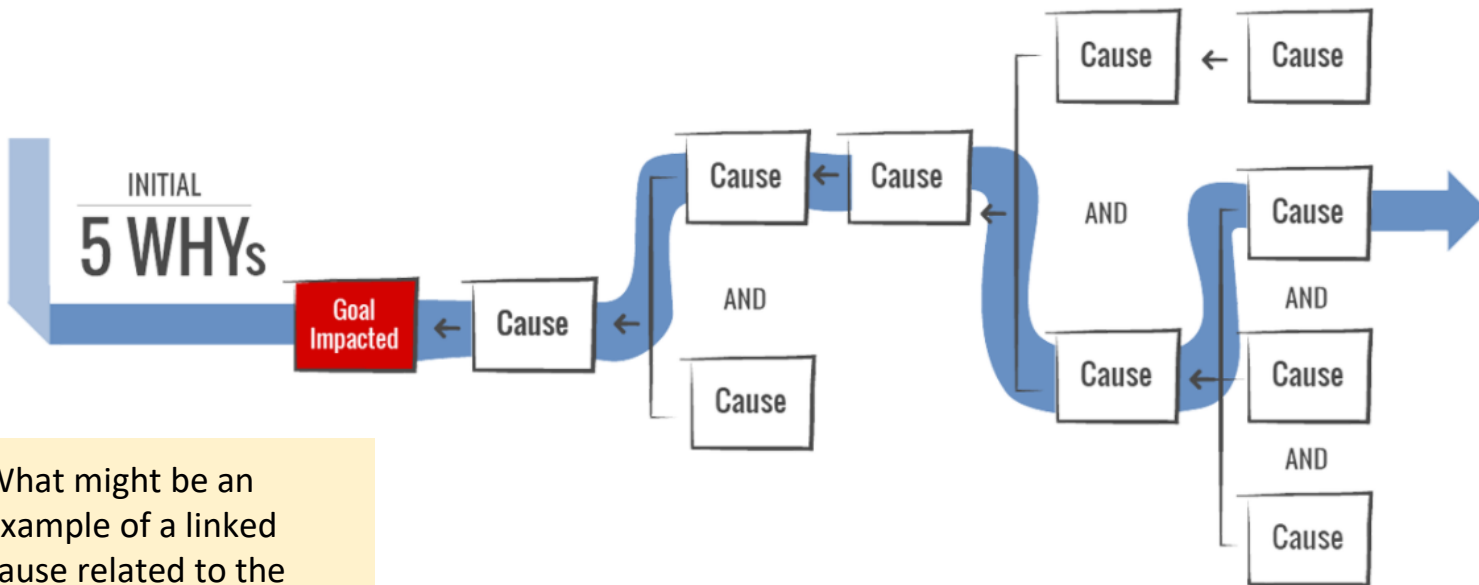NS4ed

Reframing the Cause & Effect Relationship

Linked causes are independent of each other, but they are both required to produce that effect. An AND is needed when people provide different, yet valid, explanations of a cause.

What might be an example of a linked cause related to the goal of passing a test?

Considerations for Developing a Plan of Action

What is the capacity of the team to implement the plan?

What is in your locus of control?

What resources are available to you?

How will you build buy in for the plan?

What are the Key Performance Indicators for effective implementation?

Is this the highest leverage plan of action?
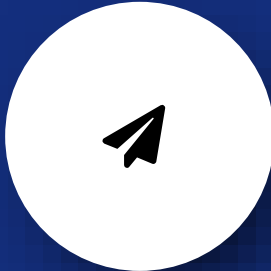
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Developing an Action Plan

Develop a S.M.A.R.T. Goal

Specific
Measurable
Attainable
Relevant
Timebound

Identify Leading Indicators

Predictive and Actionable measures that signal progress toward a goal

Identify Lagging Indicators

A measure of what has occurred and

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Developing an Action Plan

Develop a S.M.A.R.T. Goal

By November 1st, 2021 Hayes High School will increase the participation of Latino males in the early college program by 25% from the previous year to a total of 20 participants.

Identify Leading Indicators

2 bilingual parent info sessions are hosted in the 2nd semester

Marketing materials disseminated specifically targeting Latino male students.

Identify Lagging Indicators

>95% of all Latino males attend at least on info session by the end of June

By June >30 applications of Latino male students are submitted.

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Reflecting on the Data Cycle

05

What is data will we collect next?

04

Strengths, Weaknesses, Opportunities, Threats?

03

What worked and what didn't?

02

Key Performance Indicators Met?

01

Goals Met/Not Met

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Key Tools and Resources

Using Data to Inform Programming Assessment

The mini assessment provided here is meant to serve as a "gauge" for how your program is currently engaging in the topic addressed today at the Early College Summit.

Data Resource List

This list of resources is designed to connect your team to a variety of tools and supports that can assist in collecting, analyzing, and responding to your school's data.

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