

4. Get to a Root Cause

Root cause analysis is the process that allows us to move from data to action. The data analysis and identification of challenges and contributing factors tell us **what** is happening at our schools. Root cause analysis will tell us **why** it is happening. Once we understand the why, we can then develop targeted interventions to address the challenge.

For the purposes of this toolkit, root cause is defined as the deepest underlying cause or causes of positive or negative outcomes within any process that, if dissolved, would eliminate or substantially reduce the outcome. In other words, *what is the cause that without it, there would be a change in the outcome?*

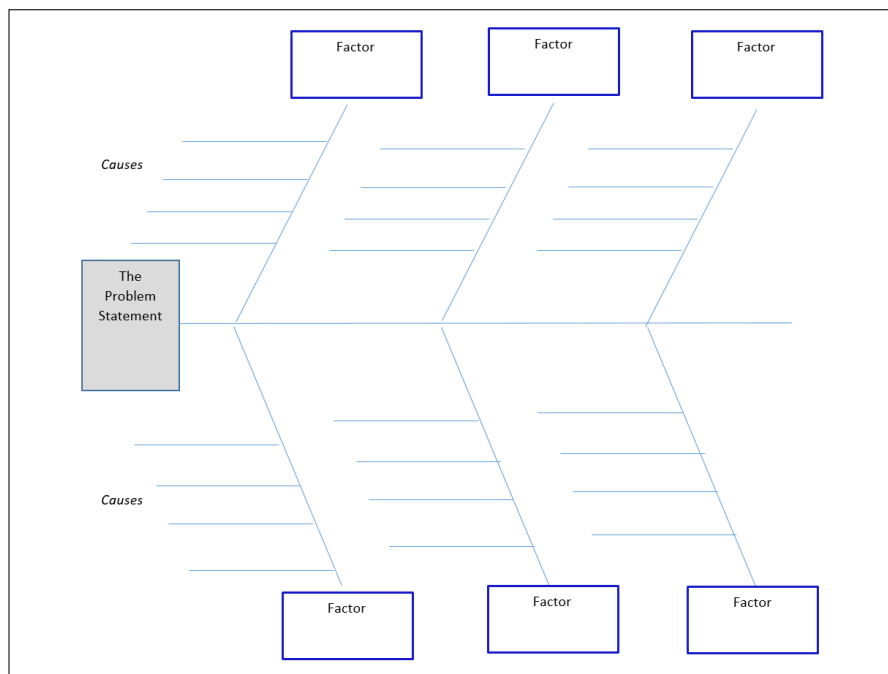


Protocols for Finding a Root Cause

There are several processes and protocols that can be used individually or together to determine a root cause of a challenge and allow the team to systemically confirm it is a root cause.

Fishbone Diagram

The [Fishbone Diagram](#) is a chart that a team can construct to better understand the contributing factors and causes of a problem. Starting with the problem allows the team to breakdown the factors that contribute to the problem and consider the causes of each factor.



There are many ways a team can approach using the Fish Bone Diagram. Here is one suggested protocol:

1. In pairs or small teams, focus on one contributing factor and brainstorm causes for this factor. Each team adds their causes to the diagram.
2. Other small teams build upon the identified causes.
3. The group circles common causes.
4. The group discusses, determines, and crosses out causes that the school cannot control.
5. Each small team or pair ranks the impact of each factor on the problem, 1 has the least impact and move up to the greatest impact. The factors with the highest "score" should be further examined.

For each cause considered for inclusion on the fishbone diagram, ask the following questions to ensure the "cause" is supported by evidence.

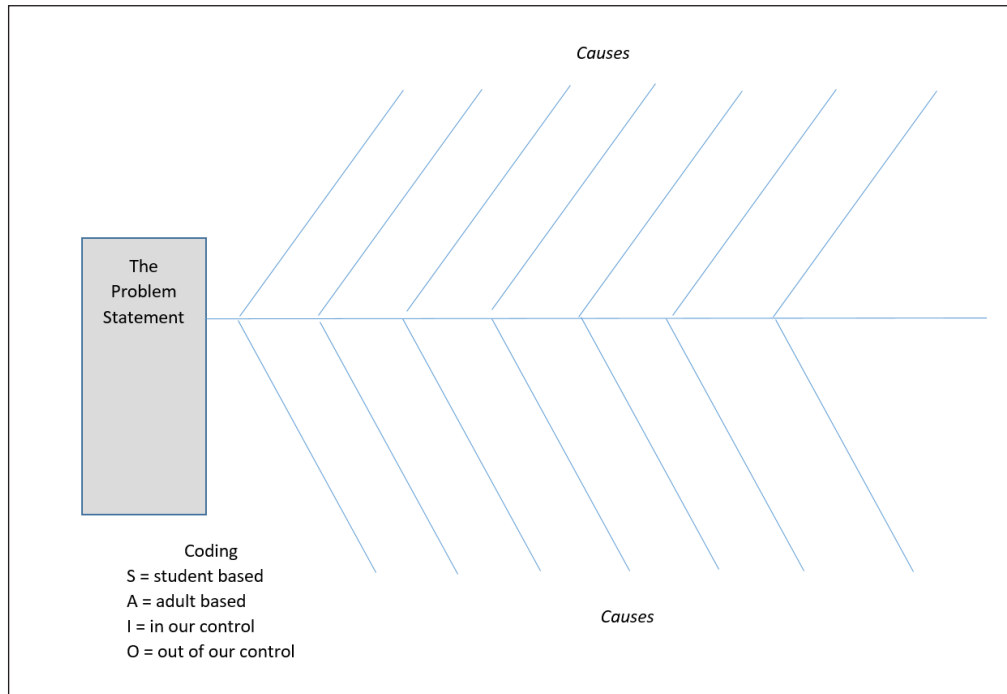
- Is it measurable?
- Do I have at least one source of data to suggest the cause exists?
- What proof do I have that the cause actually contributed to the problem?

While the Fishbone Diagram helps the team identify contributing factors and causes of priority problems, it may not identify a root cause. To determine root cause additionally ask the following questions:

- Is there research evidence suggesting the cause will result in stated effect?
- Is anything else needed, along with this cause, for the stated effect to occur?
- If we eliminate this cause will the problem be resolved or substantially improved? If the answer is yes, this cause is considered a root cause.

Fishbone 2 Diagram

The Fishbone Diagram can be done in different ways. [Fishbone 2 Diagram](#) focuses on causes, without looking at the factors. The coding on this diagram can help a team determine causes that are within their control. This will help teams determine causes that will be actionable and have impact on improvement.

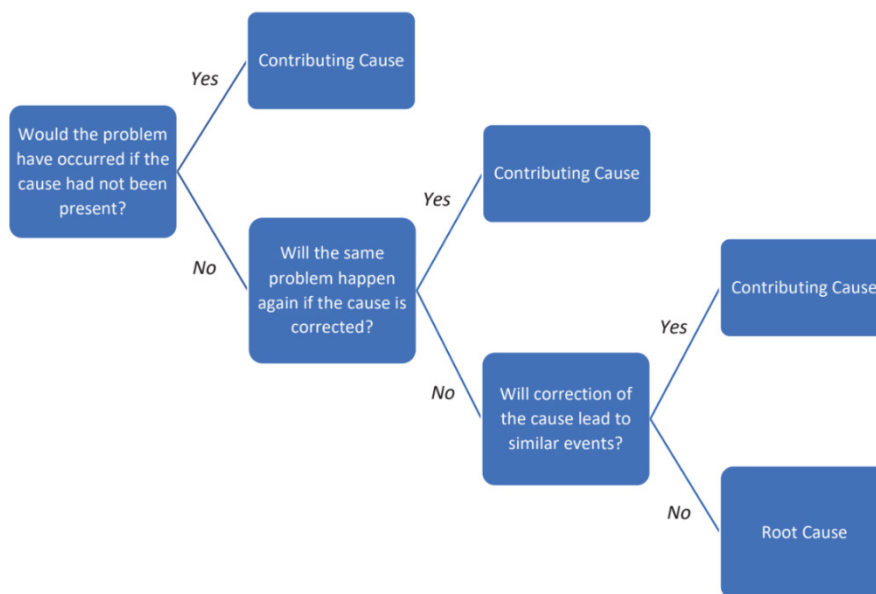


The Five Whys

Guiding Question	Possible Explanation
Why do we have this challenge?	First Response:
	Why is this the case?
	Why is this the case?
	Why is this the case?
	Why is this the case?
	Why is this the case?
Underlying Cause Statement:	

Verifying a Root Cause⁷

This [Verifying a Root Causes Diagram](#) can assist in assuring the team is getting to a root cause. The underlying causes may or may not be a root cause that is driving the conditions and factors leading to the existence and persistence of the problem statement. Use the questions within the decision tree flow chart to determine whether each underlying cause statement is a root or contributing cause and capture the results in a root cause list.



As you begin to explore and seek out underlying and root causes, the team may find the need to reexamine the data and seek out additional disaggregated data to get a clearer picture of the current status and a root cause.

Additional Questions

Because we enter the work with our own perspective and many factors influence outcomes in schools, it is important to revisit and verify a root cause. Here are some additional questions for the team to consider:

- Did multiple data sources support the identification of this root cause?
- Does the data support that this cause contributed to the problem?
- Can anything else, besides this cause, lead to the stated effect?
- Is this root cause within the school's control?
- Is this root cause focused on adult actions?
- Will the elimination of this cause change the outcome?

Real change can happen in schools when the community collectively decides to take control of what they have power over instead of craving control over what they don't have power over.

— A variation for schools on a quote by Steve Maraboli

⁷ Adapted from *Root Cause Analysis, Facilitator's Guide*. University of Maryland. Retrieved from https://aefb8617-015a-45da-8070-5c1c1ca5df3c.filesusr.com/ugd/514ff2_cd147deac39a410f977e3365b6290a74.pdf