
Tools

Cause and Effect Diagram

Identifying and Focusing on Causes, NOT Symptoms

Background

A cause and effect diagram is a visual tool used to graphically organize possible causes for a specific problem by displaying them in increasing detail. Understanding causes and their effects provides direction for improvement efforts. This tool is commonly known as the fishbone diagram because the structure resembles the skeleton of a fish.

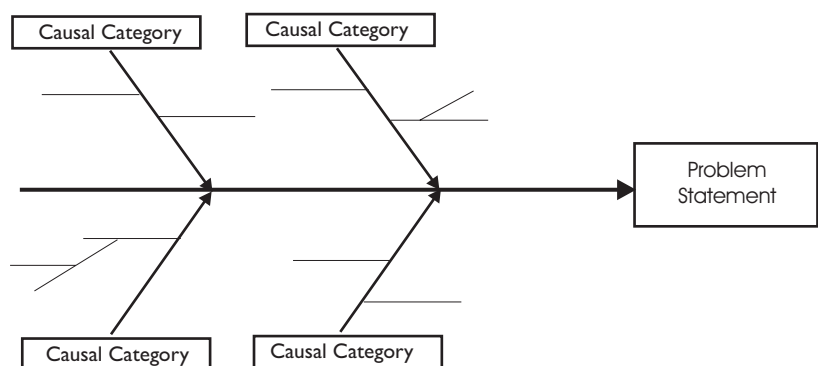
When to Use

- When focus is needed on the problem causes, not problem history or personal interest
- When focus is needed on process causes

How to Use

1. Determine major problem using brainstorming or check sheet.
2. Construct the diagram. Place problem statement in the box on the right-hand side of the diagram.
3. Draw diagonal lines to the “backbone”.
4. Label each diagonal line as a causal category. Common school improvement categories include **teacher, learner, curriculum,** and **classroom**. Production categories may include **machines, methods, materials,** or **people**. Service process categories may include **policies, procedures, equipment/space,** or **people**. All may include **environment** and **measurement**.
5. For each causal category, ask “Why does this happen?” Or “What could happen?” Push for deeper understanding. Stop when the causes are too far removed from the group’s control. Write causes on lines linked to the appropriate “rib” bones.
6. Identify root causes that appear repeatedly across categories.
7. Develop a plan to solve the major causal problems.

How Does It Look



Next Steps

Use Plan Do Study Act (PDSA) to develop an action plan to address the causal factors.

