

## Understanding the Problem: Fishbone Diagram

*Today's Problem: The volume of emails exchanged among County Office of Education staff is overwhelming and impacts productivity.*

**Your Task:** Understand what is causing the volume of email to be overwhelming for County Office of Education staff by creating a **Fishbone Diagram**.

Activity Step	Actions
<b>Preparation</b>	<ul style="list-style-type: none"> <li>Identify a <b>facilitator</b> and a <b>timekeeper</b> for your table group.</li> </ul>
<b>1. Review the problem statement.</b>	<ul style="list-style-type: none"> <li>Display the problem statement (see above). Clarify with the group as needed.</li> </ul>
<b>2. Generate Ideas</b> (5 min)	<p>Team members silently, individually brainstorm as many causes of the problem as they can, writing one idea per sticky note.</p> <p><i>Tip:</i></p> <ul style="list-style-type: none"> <li>Causes should be written as specific problems instead of general areas. For example, instead of “professional development,” one could say, “professional development is not differentiated by teacher needs.”</li> </ul>
<b>3. Share-out and Cluster</b> (15-20 min)	<ul style="list-style-type: none"> <li>A volunteer starts by reading one sticky note aloud and placing it on the table.</li> <li>Others with a similar idea should share those notes as well, and arrange them in a cluster near the original.</li> <li>Once all sticky notes similar to the initial idea have been added, repeat the process until all ideas have been read aloud and clustered.</li> </ul>
<b>4. Label the Clusters</b> (10-15 min)	<ul style="list-style-type: none"> <li>For each cluster, as a group determine a categorical label that describes the ideas in that cluster. Each of these clusters becomes a main <i>cause category</i> for your fishbone.</li> </ul> <p><i>Tip:</i></p> <ul style="list-style-type: none"> <li>Labels should be specific phrases or sentences describing a category of problems within your larger problem space.</li> </ul>
<b>5. Arrange the Fishbone</b> (5 min)	<ul style="list-style-type: none"> <li>Arrange the clusters into a fishbone shape on your poster. Each main <i>cause category</i> is a branch, and each sticky note is a bone on that branch. Combine similar sticky notes to simplify the diagram.</li> </ul>
<b>6. 5-Whys</b> (10 minutes, time permitting)	<ul style="list-style-type: none"> <li>Use the “5-Whys” to focus in on root causes and add to your diagram. For each <i>cause category</i>, ask the team, “Why does this happen?” And for that answer ask, “Why?” again. Add/adjust sticky notes as new understanding emerges.</li> </ul>
<b>Prepare for Gallery Walk.</b>	

**Possible next steps from this point: Continue causal systems analysis.**

- Identify data collection tasks that are important to expanding your understanding of the problem space, and ask for volunteers to take on those tasks.