

### Affinity Diagram

Affinity diagram is a planning tool that is used when you are trying to:

- Add structure to a large or complicated issue
- Break down a complicated issue into easy-to-understand categories
- Gain agreement on an issue or situation

Step 1: State the issue or problem to be worked on

- Set a time limit for the session (45–60 minutes)
- State a clear, objective problem that all agree to

Step 2: Generate ideas for the issue in question (index cards/post-its)

- Each participant thinks of ideas and writes them individually on cards
- List one idea per card

Step 3: Collect the cards or post-its

- Collect all cards, mix them up, and then spread them out on a flat surface

Step 4: Arrange the cards or post-its into related groups

- All participants should pick out cards that list related ideas and set them aside. Repeat until all cards have been placed in groupings.
- Process takes about 15 minutes and works best when conversation between participants is not allowed.

Step 5: Create a title or heading for each group

- Develop a title or heading that best describes each group of cards.
- Headings should be one to three words.
- Groups that are similar should be placed next to each other.
- May wish to combine similar groups into one large group.
- Continue until there is agreement from team on grouping of cards.

Step 6: Wrap the session

- Major groups have been identified
- Assignments have been made pertaining to results

## Force Field Analysis 1

Force Field Analysis is an analysis tool that is used when you are trying:

- To identify “roadblocks” to reaching the goal
- To identify possible causes and solutions to a problem or an improvement opportunity
- To achieve goal but team seems to be “stalled”

1. Describe the current situation. Is this definition agreed to by all involved?
2. Review the data supporting the definition of current situation.
3. Review the goal statement on action plan. Is there agreement on it?
4. Determine driving and restraining forces.

**Helping:** actions, skills, procedures, culture, people, etc. that help move you toward your goal.

**Hindering:** actions, skills, procedures, culture, people, etc. that can keep you from reaching your goal.

### Force Field Analysis

Helping	Hindering

An example of how to use the Force Field Analysis for problem solving about behavior issues is:

**Action Guide #3—Schools**  
**Critical Element 19: Developing and Teaching Behavioral Guidelines**

The development and instruction of general behavioral norms and expectations will provide overarching principles to guide the learning of specific behaviors. The behavioral guidelines will support a safe, positive, learning environment.

Question: What are the behaviors and that help/hinder learning in the classroom?

Helping	Hindering
<ul style="list-style-type: none"><li>▪ Follow body basics (keep hands and feet to yourself)</li><li>▪ Follows directions</li><li>▪ Take care of equipment</li><li>▪ On time</li><li>▪ Listen when others are speaking</li><li>▪ Use proper language</li></ul>	<ul style="list-style-type: none"><li>▪ Tattling</li><li>▪ Unresolved conflicts</li><li>▪ Playground problems that are carried over into the classroom after recess</li></ul>

Focus: Conflict

Question: If we put more energy into helping side, will it affect the hindering side? If we continue to promote listening when others are speaking and using proper language as part of the training in conflict resolution skills, will the problems listed on the hindering diminish?

## Force Field Analysis 2

**Ground Rule #1:** Do not evaluate the ideas.

**Ground Rule #2:** Only the discussion leader may interact with the listener—and he may only ask clarifying questions designed to catch the meaning of the idea.

**Ground Rule #3:** Have a recorder list the ideas where they can be kept on display.

**Note:** If someone's ideas are seemingly unrelated or diametrically opposed to the discussion leader's views, they still should be listed. (Reserve judgment!)

### Steps:

1. On paper list (individually) six forces which impact positively on this (a given) situation. For example: list six things that keep us from nuclear confrontation.
2. Below these, list six forces that impact negatively on this situation. For example: list six things impelling us toward nuclear confrontation.
3. The leader calls on each person and elicits one positive force from each person.

\* This process may continue: A) until new ideas emerge, or B) until each person has had an opportunity to suggest one or two.

4. Next, the discussion leader elicits a similar response from the group with respect to forces that are negative. The procedure is the same.

At this time, two lists should exist: 1) Forces against, and 2) Forces for.

Give each person two votes. Ask them to vote for the two forces (in the negative column) that have the greatest potency to keep an initiative from being successful.

- Tabulate the votes. (Show of hands, calling out numbers, post its, etc.)
- Using the Force Field Analysis form, list the most potent positive and negative forces operating.
- If time permits, break the group up into teams of 3 people. Ask them to identify 3 ways in which the key negative force (the one getting the most votes) can be overcome.
- List their solutions.

## Force Field Analysis

**Problem:**

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### Forces Which Are Potential Allies in Solving the Problems

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

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### Forces Operating Against the Solution of the Problem

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

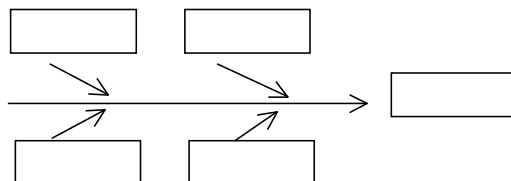
## Cause and Effect Diagram

Cause and Effect diagram (also known as Fishbone diagram) is an analysis tool used to:

- Categorize potential causes of a problem or issue
- Analyze what is really happening in a process
- Teach teams and individuals about new processes or procedures

### 1. Prepare for the Cause and Effect session

- Recorder creates a flip chart (refer to diagram)



- Provide time limit to session (60 minutes)

### 2. Identify the effect

- Effect refers to the issue (problem) you are trying to change.
- Recorder writes the effect in the box on the right side of diagram.

### 3. Identify the major cause categories

- Major causes are identified and boxes labeled.
- Possible categories:
  - methods, machines, materials, people
  - place, procedure, people, policies
  - surroundings, suppliers, systems, skills

### 4. Brainstorm potential causes for the problem

- Brainstorm ideas, agree as a group where to place on diagram OR individually write on post-its to share with group and agree before placing on flip chart.
- May list a possible cause under more than one major category.

### 5. Review each major cause category

- Look for causes that appear in more than one category
- Circle “most likely causes”
- Ask question: “Why is this a cause?”
- Record answers to “why?”

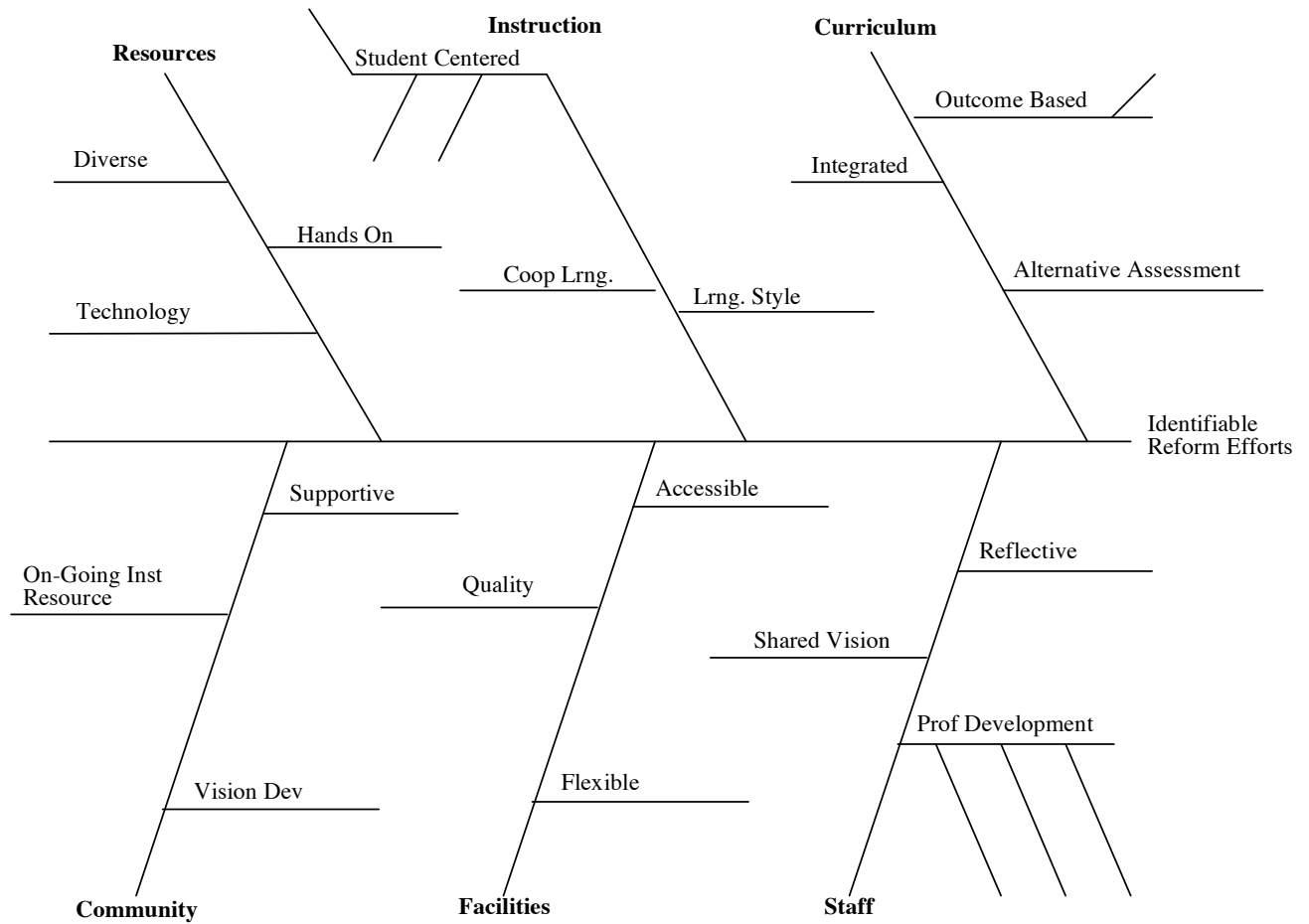
### 6. Reach an agreement on most probable cause(s)

- Narrow list down from the “most likely causes” to the “most probable causes”

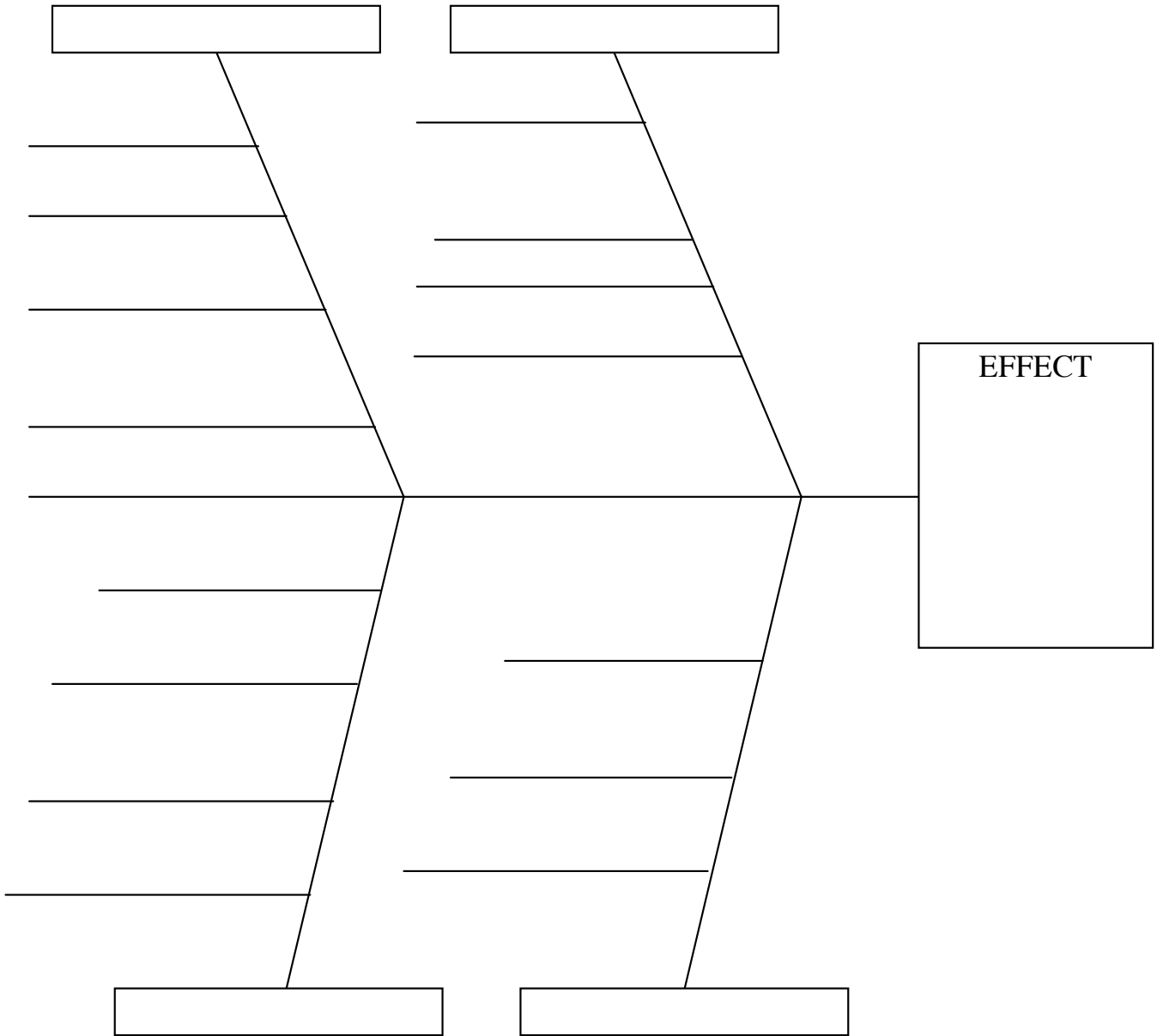
### 7. Wrap up the Cause and Effect session

- “Most probable causes” have been identified
- Assignments to gather data to prove/disprove “most probable causes”

**Sample**



# The Fish Bone





## Five Whys

- What?** The **Five Whys?** are simply a process of asking Why? at least five time in a row to detect the root cause or meaning of a particular problem or situation.
- Where?** The **Five Whys?** are used any place there is a human factor present. Cut through layers of bureaucracy to find the true meaning.
- When?** **Asking Why?** is necessary when people do not truly understand the situation or when a deeper understanding is necessary.
- Why?** **The Five Whys?:**
- Cause people to use higher order thinking skills
  - Cut through layers of bureaucracy to find the true meaning
  - Cause people to challenge their current situation or problem

**Example:** Discussion about implementing “Block Scheduling”

**Q. Why isn't more time being spent working collaboratively?**

*A. There is not enough time in class.*

**Q. Why isn't there enough time in class?**

*A. There is too much material to cover.*

**Q. Why is there too much material to cover?**

*A. We keep adding, but don't abandon things in our curriculum.*

**Q. Why do we keep adding, but we don't abandon things in our curriculum?**

*A. We don't know what's important to keep and/or throw out.*

**Q. Why don't we know what's important to keep and/or throw out?**

*A. We don't coordinate with other teachers very well between and within grade levels.*

Team consensus was reached: a process to help articulate curriculum content between and within grade levels was the first thing that needed to be worked on (root cause of the problem). This step is needed if block scheduling is implemented or not. An external person to facilitate the process will need to be identified and in-service time will be used to implement a process for sorting and selecting the content to be taught at each grade level throughout the district.

In addition, survey responses indicate that collaborative work is perceived as something else to do instead of a process for accomplishing work. The group will ask that people share and continue to focus on building in collaborative work practices. At least 5 minutes will be dedicated to this topic at all grade-level meetings and faculty meetings. The team will continue to monitor time spent in collaborative work once each trimester.

**Theory Statements:** If, we improve the process to select and abandon content, then more time will be available for collaborative classroom activities. If, we promote ideas about how to build in collaborative classroom activities, then more time will be spent on collaborative activities in the classroom.

## Process

1. Identify a problem, situation or concept to be studied.
2. Ask Why? this particular condition exists.
3. Each time the question Why? is answered ask Why? again.
4. Continue to ask Why? until everyone involved is satisfied they have arrived at the root cause.

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## If...Then

The If...Then strategy developed by David Langford is helpful in predicting the consequences of decisions that we make, and useful tool in the development of a theory of change.

<b>What is it?</b>	The If...Then strategy is a projection tool used for prediction of consequences of proposed changes.
<b>When is it used?</b>	The If...Then strategy is used when a team or individual needs a safe method to compare and study the ramifications of proposed changes in a system.
<b>Where is it used?</b>	The If...Then strategy is a useful process to study the predicted consequences of multiple improvement options.
<b>Why is it used?</b>	<ul style="list-style-type: none"><li>• Allows people to look further into the future rather than just identifying the next step.</li><li>• Helps everyone in an improvement process understand the ramifications of change.</li><li>• Can be used to prioritize suggested improvement by studying the consequences of improvement.</li></ul>
<b>Sample uses:</b>	Use the If...Then strategy: <ul style="list-style-type: none"><li>• to study what would happen if we no longer collected tardy data.</li><li>• to predict what would happen if we removed grades or eliminated performance appraisals.</li><li>• to study proposed classroom management improvements.</li><li>• to study different fund raising activities.</li><li>• to study the problems with different room arrangements.</li><li>• to study moving teachers to different buildings.</li></ul>

## The Process

1. Clearly state the proposed change.
2. Brainstorm the first proposed change and record responses.

If we...Then...If we...Then...If we...

*Example:* **If we...**changed to a block schedule  
**Then...**we would need more time for teachers to plan together  
**If we...**schedule for teacher planning time  
**Then...**that would impact the teacher-student contact time  
**If we...**started planning with students instead of for them...

3. It may be important to compare the consequences of several improvement strategies.

## **C & S - Consequence and Sequel**

### **Focus:**

**C & S** is a crystallization of the process of looking ahead to see the consequences of some action, plan, decision, rule, and/or invention.

**C & S** deals with what may happen after the decision has been made. There are immediate consequences as well as short-term (1-5 years), medium-term (5-25 years) and long-term consequences (over 25 years).

**C & S** is concerned with action of some sort, either the action that one intends to take oneself or the action that others are taking. The intention is to enlarge the view beyond the immediate effect of that action. An action may seem worthwhile if the immediate effect is good. But, if one makes a deliberate effort to look at longer term consequences, the action may not be worthwhile at all. Conversely, an action that has good long-term consequences may not seem very enticing at the moment.

### **Principles:**

- Other people may be able to see the consequences of your action more easily than you can yourself.
- It is important to know whether the consequences are reversible or not.
- The immediate consequences and the long-term consequences may be opposite: immediate consequences may be good and long-term consequences bad, or the other way around.
- You should look at the consequences, not only as they affect you but as they affect other people as well.
- You should do a full C & S before deciding which consequences you should consider.

### **Process:**

Open discussion with the class as a whole, acting as individuals rather than groups.

- Do long-term consequences matter?
- If it is not easy to see the consequences should you bother with them?
- When is it most useful to look at the consequences?
- Whose business is it to look at consequences?

**C & S = ? Consequence and Sequence**

**IF**

**THEN**