## TABLE OF CONTENTS

- Building Consensus ................................................................. 2
- Multivoting .............................................................................. 4
- Nominal Group Technique ....................................................... 5
- Project Management — Gantt Chart ......................................... 7
- Brainstorming .......................................................................... 9
- Using Flip Charts ...................................................................... 10
- Affinity Diagram ....................................................................... 11
- Flowchart ................................................................................ 12
- Force Field Analysis ................................................................. 15
- Cause & Effect Diagram ............................................................ 16
- Pareto Analysis .......................................................................... 17
- Issue Bin .................................................................................. 18
- Plus/Delta ................................................................................ 19
- Student Focus Test .................................................................... 20
- Systems Charting ....................................................................... 23
- Understanding Processes ......................................................... 27
- Systems Chart ........................................................................... 28

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**BUILDING CONSENSUS**

From "The Team Handbook For Educators" by Peter R. Scholtes, © Joiner and Associates, 1994

**What Is Consensus?**
Any group's goal should be to reach decisions that best reflect the thinking of all group members. We call this "reaching consensus". It is easy to be confused about what consensus is and isn't, so here are some guidelines:

- **Consensus is . . .**
  - Finding a proposal acceptable enough that all members can support it; no member opposes it

- **Consensus is not . . .**
  - A unanimous vote. A consensus may not represent everyone's first priorities.
  - A majority vote. In a majority vote, only the majority gets something they are happy with. People in the minority may get something they don't want at all, which is not what consensus is all about.
  - Satisfying everyone completely. It is impossible to give everyone everything they may want.

- **Consensus requires . . .**
  - Time
  - Active participation of all group members
  - Skills in communication: listening, conflict resolution, discussion facilitation
  - Creative thinking and open-mindedness

**Developing Consensus: Setting a Process and Establishing Ground rules**

Aiming for consensus at a meeting requires a much different strategy than if you were just going to keep on arguing until you had a unanimous vote (or even a majority vote). To reach consensus, the team must let every team member participate fully in the decision. This probably means going through several rounds of the outlined process. How would you know when you have reached consensus? Probably no one will be completely satisfied with the decision, but everyone can live with it. The decision-making processes described below should help you reach consensus, particularly when the group is new.

**When to move to consensus?**

Not every decision need have the support of every member—in fact, it is impossible to have such agreement in any group. Your group should decide ahead of time when you will push for consensus. Decisions that may have a major impact on the direction of the project or conduct of the team—such as which problem to study or what ground rules to establish—should belong to the whole team and be supported by consensus.
TIPS FOR SUCCESSFUL CONSENSUS

1. Listen Carefully. Ask for reasons and seek out the assumptions behind statements. Be open to others’ reactions to your ideas and consider them carefully.

2. Encourage all members to participate fully. Don’t assume that silence means agreement. Periodically circle the group and have each member state his or her view.

3. Seek out differences of opinion. Probe for alternative viewpoints. Disagreements are natural and helpful because they increase the range of information and opinions that the group can use in its decision process.

4. Search for alternatives that meet the goals of all members. Don’t assume someone must win and someone must lose. When there’s a stalemate, look for the next most acceptable alternative for all members.

5. AVOID CHANGING YOUR MIND ONLY TO AVOID CONFLICT.

6. Don’t just argue for your point of view. Seek ways of combining your ideas with others’ views. Try to incorporate criticism of your ideas into your proposals.

7. Balance power. If one or two group members have more power or authority than the others (for example, if one member supervises the group), then the member with more authority should not state his/her view until late in the discussion after all other views have been heard.

8. Make sure there is enough time. The “reaching consent” part of consensus takes a lot of time. Meetings should be long enough to allow for full discussion, and there should be enough meetings for a decision to emerge.

9. Check understanding. Check to see if everyone understands the decision and can explain why it was the best decision.

Techniques to use for reaching consensus:
- Multi-voting (see page 4)
- Nominal Group Technique (see page 5)
- Brainstorming (see page 9)
- Pareto Analysis (see page 17)
Building Consensus

Multivoting

Multivoting is a way to conduct a straw poll or vote to select the most important or popular items from a list with limited discussion and difficulty. This is accomplished through a series of votes, each cutting the list in half—even a list of 30 to 50 items can be reduced to a workable number in 4 or 5 votes. Multivoting often follows a brainstorming session to identify the few items worthy of immediate attention.

How to conduct a Multivote

1. First, generate a list of items and number each item.
2. If two or more items seem very similar, combine them, but only if the group agrees that they are the same.
3. If necessary, re-number all items.
4. Have all members choose several items they would like to discuss or address by writing down the numbers of these items on a sheet of paper. Allow each member a number of choices equal to at least one-third of the total number of items on the list (48 item list = 16 choices; 37 item list = 13 choices).
5. After all the members have silently completed their selections, tally votes. You may let members vote by a show of hands as each item number is called out. If there is a need for secrecy, conduct the vote by ballot.
6. To reduce the list, eliminate those items with the fewest votes. Group size affects the results. A rule of thumb is: If it is a small group (5 or fewer members), cross off items with one or 2 votes. If it is a medium group (6 to 15 members), eliminate anything with 3 or fewer votes. If it is a large group (more than 15 members), eliminate items with 4 votes or fewer.
7. Repeat steps 3 through 6 on the remaining list with the choices reduced accordingly. Continue this until only a few items remain. If no clear favorite emerges by this point, have the group discuss which item should receive top priority. Or you may take one last vote.
BUILDING CONSENSUS

Building Consensus: Nominal Group Technique

The nominal group technique (NGT) is a more structured approach than either brainstorming or multivoting to generating a list of options and narrowing it down. It is called "nominal" because during the session the group doesn't engage in the amount of interaction typical of a team discussion. Because of the relatively low level of interaction, NGT is an effective tool when all or some group members are new to each other. NGT is also good for highly controversial issues or when a team is stuck in disagreement.

NGT, Part One: A formalized brainstorm

1. Define the task in the form of a question, just as you would for brainstorming.
2. Describe the purpose of the discussion and the rules and procedures for the NGT.
3. Introduce and clarify the question (e.g. "What are our institution's key vulnerabilities in moving our quality effort forward?"). The facilitator reads the question and posts it on the wall — so anyone can refer back to the question at any time. Anyone who doesn't understand the question should ask for more explanation. Do not let this develop into a discussion of the issue itself.
4. Generate ideas. Follow the Affinity Diagram process by eliminating similar ideas, organizing around common themes and adding additional items that spring to mind during this initial scan.
5. Discuss the ideas - read every idea and discuss. Clarify wordings and meanings so that there is shared understanding. Reorganize ideas if necessary; add heading themes, etc. to get total agreement on the list of ideas and their meanings.

NGT, Part Two: Making the selection

1. Weighting the ideas. Every member is given a series of small Post-it® notes. They are to write a numerical value and Post-it® on each idea heading. These numbers reflect their perception of the relative importance of each item (this is not a ranking; it's a weighting) with 1 = low importance and 10 = high importance.
2. Collating the results. When all items have been "weighted" by each member, add up the values.
3. Reporting the results. Now prepare a tally sheet and a Pareto Chart of the results with the highest valued items to the left and lower valued items to the right, etc.
4. The group reviews the results, and discusses the reaction. Were there any surprises? Any objections? Does anyone want to lobby for or against certain items and ask for another vote?

If members agree on the importance of the items that got the highest scores, the NGT can end the discussion, and the team will have to decide what to do next. If members do not agree, the team could focus its efforts on investigating the two or three items that received high scores.

Building Consensus: Criteria Matrix

This technique is another approach to building consensus by focusing on criteria around which ideas will be tested, numerical values assigned, and consensus reached.

1. Framing the question. This step is very similar to the initial steps of Multivoting. The facilitator frames the question to be answered through the process (e.g. "What should be the content of a management training program at our college?"). The group agrees to the question and it is posted for all members to view throughout the process.
2. Framing the criteria. This step focuses on developing a list of criteria upon which we will test the ideas that surface (e.g., ideas on what content should be included in the training). Use a brainstorming technique to surface the criteria and a multivoting technique to establish the final list of criteria and their relative importance (value). Post this list for all to see.

Here is an example of possible criteria for improving an advising system.

<table>
<thead>
<tr>
<th>Value (importance)</th>
<th>Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Accurate advising of individual students</td>
</tr>
<tr>
<td>8.2</td>
<td>Effective, quality service to students</td>
</tr>
<tr>
<td>6.9</td>
<td>Productive partnerships with academic programs</td>
</tr>
<tr>
<td>4.1</td>
<td>Create better teamwork among advising center staff</td>
</tr>
<tr>
<td>2.1</td>
<td>Personal Development</td>
</tr>
</tbody>
</table>

3. **Pareto Analysis.** You can now chart the results of your multivoting as a simple Pareto Chart which shows you the most important criteria (the 80/20 rule of pareto analysis).
PROJECT MANAGEMENT: GANTT CHART

(From ChartingRight Software, ProcessFusion Software,
http://chartingright.virtualave.net/planning.htm, and from Los Angeles County Sheriff
Department, Emergency Operation Bureau, http://www.eob.org/gantt.htm)

What is it
A Gantt charts is a project planning tool that can be used to represent the timing of tasks
required to complete a project. It is named after Henry Laurence Gantt, the American engineer
and social scientist who first developed it. Gantt charts have been around since the early 1900s
and are frequently used in business to plan and manage large projects. Because Gantt charts
are simple to understand and easy to construct, they are used by most project managers for all
but the most complex projects. A Gantt Chart is a diagram that documents the schedule, events,
activities, and responsibilities necessary to complete a project or implement a group's proposed
solution. A Gantt Chart can also allow a group to document the assumptions underlying their
implementation plan. Based on these assumptions, the group can develop contingency plans in
case deadlines for the implementation are not met.

In a Gantt chart, each task takes up one row. Dates run along the top in increments of days,
weeks or months, depending on the total length of the project. The expected time for each task
is represented by a horizontal bar whose left end marks the expected beginning of the task and
whose right end marks the expected completion date. Tasks may run sequentially, in parallel or
overlapping.

As the project progresses, the chart is updated by filling in the bars to a length proportional to
the fraction of work that has been accomplished on the task. This way, one can get a quick
reading of project progress by drawing a vertical line through the chart at the current date.
Completed tasks lie to the left of the line and are completely filled in. Current tasks cross the line
and are behind schedule if their filled-in section is to the left of the line and ahead of schedule if
the filled-in section stops to the right of the line. Future tasks lie completely to the right of the
line.

In constructing a Gantt chart, keep the tasks to a manageable number (no more than 15 or 20)
so that the chart fits on a single page. More complex projects may require subordinate charts
which detail the timing of all the subtasks which make up one of the main tasks. For team
projects, it often helps to have an additional column containing numbers or initials which identify
who on the team is responsible for the task.

Often the project has important events which you would like to appear on the project timeline,
but which are not tasks. For example, you may wish to highlight when a prototype is complete or
the date of a design review. You enter these on a Gantt chart as “milestone” events and mark
them with a special symbol, often an upside-down triangle.

When to use it
Documenting the steps, their sequence and assigned responsibilities required for an
implementation plan.

You can also create Gantt charts using a project management computer package. A sample
chart made using Microsoft Project appears below. Project is the most widely used scheduling
tool for small projects. It is available on the PC's in MechE 308 for use by IT students.
Results

<table>
<thead>
<tr>
<th>WBS</th>
<th>Task Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Define specifications</td>
</tr>
<tr>
<td>1.1</td>
<td>Identify customers</td>
</tr>
<tr>
<td>1.2</td>
<td>Interview 10 customers</td>
</tr>
<tr>
<td>1.3</td>
<td>Interpret requirements</td>
</tr>
<tr>
<td>1.4</td>
<td>Benchmark products</td>
</tr>
<tr>
<td>1.5</td>
<td>Define target PDS</td>
</tr>
<tr>
<td>1.6</td>
<td>Target PDS Released</td>
</tr>
<tr>
<td>2</td>
<td>Generate concepts</td>
</tr>
<tr>
<td>2.1</td>
<td>Review comp products</td>
</tr>
<tr>
<td>2.2</td>
<td>Search patents</td>
</tr>
<tr>
<td>2.3</td>
<td>Brainstorm concepts</td>
</tr>
<tr>
<td>3</td>
<td>Select top 2 concepts</td>
</tr>
<tr>
<td>4</td>
<td>MQ Presented</td>
</tr>
<tr>
<td>5</td>
<td>Profile motor power</td>
</tr>
<tr>
<td>5.1</td>
<td>Design test stand</td>
</tr>
<tr>
<td>5.2</td>
<td>Build test stand</td>
</tr>
</tbody>
</table>

The team now has a way to break the implementation plan into achievable steps; a method to assign ownership for each step to a group member; a method to track how long each task will take.

Tips to help you build it
Step 1. Set up the Gantt Chart into three columns and several rows.
Step 2. Label the first column 'Task'.
Step 3. Label the second column 'Who'.
Step 4. Label the third column 'When'.
Step 5. Break the implementation plan or project into achievable tasks and list the tasks in the rows of the first column.
Step 6. Assign responsibility for each task to a group member(s) and place their name(s) in the second column on the same line with that task.
Step 7. Decide how long each task will take and set a realistic completion date.
Step 8. Document the assumptions on which the plan is based, and the contingency plans to implement if those assumptions are not valid.
BRAINSTORMING

What is its Purpose?
Brainstorming helps to establish a common method for a team to creatively and efficiently generate a high volume of ideas on any topic by creating a process that is free of criticism and judgment.

What does it accomplish?
- Encourages open thinking
- Gets all team members involved and enthusiastic so that a few people don't dominate the whole group
- Allows team members to build on each other's creativity while staying focused on their joint mission

How do we do it?
1. The central brainstorming question is stated, agreed on, and written down for everyone to see. Often it is best phrased as a why, how, or what question.
2. Allow a minute or two of silence for everyone to think about the question.
3. Each team member, in turn, gives an idea. Or have group members call out their ideas. No discussion or evaluation of any kind is permitted — make sure no idea is criticized!
4. Record each idea on a flipchart, in words as close as possible to those used by the contributor. Keep generating ideas until several minutes of silence produces no more.

Considerations
- No criticism! Laughter and groans are criticism. When there is criticism, people begin to evaluate and censor their ideas before contributing them. Fewer ideas are generated, and creative possibilities are lost.
- Avoid all evaluation, even a positive statement like "Great idea!" (which implies that another idea that did not receive praise was mediocre). It is difficult for judgment and creativity to operate simultaneously.
- The more ideas the better. The more ideas you generate, the higher the number of good, creative, useful ones.
- The crazier the better — be unconventional and think outside the box. Offer the opposite of someone else's idea. Don't hold back anything. "Outside the box" ideas are often the most creative.
- Encourage everyone to say whatever ideas come into their heads. Don't slow down the generation of ideas because of a slow recording process — use several recorders if necessary.
- Keep all ideas visible, and encourage people to build on each other's ideas.
USING FLIP CHARTS

Definition: A flip chart is a public place to record a group's contributions. The standard flip chart is a large pad mounted on an easel. Writing on a white marker board or on a blackboard can serve the same ends.

Writing group ideas and contributions on flip charts:

- serves as a physical focus for the group, a place to direct their attention and energy
- serves as the group's common notes
- keeps people from repeating the same things over and over
- makes a record of information
- records people's contributions, allowing easy recall of ideas
- separates ideas from individuals who originated them
- acknowledges value of ideas
- gives everyone an equal chance to participate and influence the outcome

Tips for using flip charts effectively:

- put no more than 7 -12 lines on a sheet, the fewer the better; keep to 5-6 lines if you will refer to the phrases repeatedly
- listen attentively, looking for a key phrase that will summarize the statement
- don't try to write everything down
- write what you think best captures the thought; if not certain, ask "Does this capture what you said?"
- better to select a few words that the participant used than to reword what was said: "Can you summarize your idea in a phrase or two so I can record it here?"
- select one handwriting style and stay with it; keep the size of letters consistent
- use your whole arm when you write; moving just the wrist will produce small letters
- use black, dark blue, dark purple, and green for main text; highlight with red, orange, yellow and lighter colors
- don't exceed three colors on a page
- use colors meaningfully, e.g., use a specific color for questions and a different color for answers

Two good resources on using flip charts


**AFFINITY DIAGRAM**

What is its Purpose?
An Affinity Diagram allows a group to generate a large number of ideas or issues and then organize and summarize natural groupings among them to understand the essence of a problem. Also called an Affinity Chart, or a KJ Chart (after Jiro Kawakita, a Japanese anthropologist who invented the KJ method, which led to the chart).

What does it accomplish?
- Encourages creativity by everyone in the group
- Breaks down communication barriers
- Allows consensus to emerge naturally from a group
- Identifies clusters of related ideas (or issues, problems, or solutions)

How do we do it?
1. Phrase the issue under discussion in a full sentence preferably in neutral terms, write it at the top of a large whiteboard, and underline it.
2. Brainstorm ideas or issues or solutions – using Post-it® notes for each idea or issue. These should be stated concisely, but never only as a single word.
3. Attach the notes to the whiteboard in a totally random pattern.
4. In silence, without any discussion, the participants should try to move the Post-it® notes around to form groups of related ideas. The notes may be moved several times before they find places that satisfy all participants, so this stage could take an hour, or longer.
5. Having completed the groupings, the participants discuss the final shape of the chart. As the motives for placing notes in specific spots are explained, minor movements may be allowed. Create a title card for each group, or draw a box around each group and name it. Normally five to ten groups emerge. Large groups can be divided into subgroups.
6. Evaluate the chart to determine where the group should invest further efforts. (If it is necessary to select one or a few groups for further work, a multiple voting method might be used.)

FLOWCHART

What is a Flowchart?
A pictorial representation of a work process showing all work steps in sequence, handoffs, approvals, and process boundaries.

Flow charts are usually a sub set of a higher-level document called a "process map."

What is its Purpose?
A flowchart allows you to identify the actual flow or sequence of events in a process that any product or service follows.

What does it accomplish?
- Shows complexity, problem areas, redundancy or unnecessary loops where simplicity may be possible.
- Compares and contrasts the "as is" vs. "should be."
- Allows for a team to come to agreement on the steps of a process.

Due to the pressure of normal work, you may be tempted to skip flow charting. Flow-charting work processes will reveal as much about process problems and opportunities to improve your work process as any other exercise. *Charting your entire work process has several benefits:*

✓ It’s easier to spot critical measurement points, interfaces, hand-offs, approval points, major cost elements and possible failure areas.
✓ It facilitates troubleshooting.
✓ Comparison with other systems is easier.
✓ You can dissect each step in minute detail if necessary.
✓ It helps define process improvement objectives.

Guidelines:
*Review existing documentation. Don’t re-invent the wheel. Work process analysis may already be defined in existing job documentation.*

Check for:
- Instructions on backs of forms
- Troubleshooting guides for tracing technical problems
- Policy and procedure manuals
- Checklists
- Training programs or videos
- Published works
- Consult and/or observe expert practitioners

Modification and updates may be required, but in any case it’s simpler than starting from scratch.

*Include all major activities and milestones, at a minimum:*
- List all major activities in sequence.
- Include all milestones and inspection points.
- List all tools required for each step.
Complex work requires more detailed information. A one-page outline is sufficient to describe a process for completing an expense report. Many pages of documentation with diagrams may be necessary to describe the procedures for troubleshooting an electrical motor.

Review the process with your customer. The responsibility for documenting processes is with the person(s) who carry out the work. The people who carry out the process will want to review the procedures or planned work process to ensure that they get a quality output and are accurate. Sometimes, the stakeholders are more knowledgeable, and are a valuable resource.

How do we do it?
To create a flow chart, you need the following materials:
  - Large whiteboard or flip chart
  - Pads of large Post-Its™ (3 x 5)
  - Color markers

Recommended Method:
1. Write each work activity on a Post-It™.
2. Arrange activities in sequence on the white board.
3. Move them around as needed.
4. Add steps initially overlooked. Rearrange as needed.
5. Draw symbols around tasks to indicate type of activity.
6. Draw connecting arrows in pencil to indicate direction of workflow.
7. Add loopbacks.
8. Make adjustments as needed. Darken the lines with pen when you are sure the flowchart is correct.
9. Redraw it on smaller paper. If possible, record on PC using flow chart software.

Remember:
- Determine the parameters of your process.
- Team members need to agree on the level of detail.
- Determine the steps in the process.
- Sequence the steps – arrange them in the order they are carried out. Use Post-it® notes so you can move them around.
- Draw the flowchart using the appropriate symbols.

- Diamonds represent key decision points
- Rectangles represent process steps
- Circles (or rounded corner rectangles) represent the start or stop of a process
FORCE FIELD ANALYSIS

What is its Purpose?
A Force Field Analysis allows a team to identify the forces and factors in place that support or work against the solution of an issue or a problem.

What does it accomplish?
- generates an overview of the current situation and possible actions to improve it
- depicts the equilibrium of "positives" and "negatives" forces in a current situation
- Encourages people to agree about the relative priority of factors on each side.
- Encourages honest reflection on the real underlying roots of a problem and its solution.

How do we do it?
1. Draw a large "T" on a flipchart.
2. At the top, define clearly the change desired by describing the objective or ideal sought.
3. Brainstorm the forces that are driving you towards the ideal solution and list them on the left side.
4. Brainstorm the forces that are restraining you from moving towards the ideal solution and list them on the right side.
5. Prioritize the driving forces that can be strengthened and the restrainers that may be removed. (The relative strengths can be symbolized with arrows of varying lengths.)
6. Identify and prioritize:
   - strategies to sustain the driving forces
   - strategies for overcoming the restrainers.

<table>
<thead>
<tr>
<th>List the Driving Forces</th>
<th>List the Restraining forces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driver 1</td>
<td>Restrainer 1</td>
</tr>
<tr>
<td>Driver 2</td>
<td>Restrainer 2</td>
</tr>
<tr>
<td>Driver 3</td>
<td>Restrainer 3</td>
</tr>
</tbody>
</table>

Think of the driving forces as pushing the center line toward the right, and think of the restraining forces as pushing it left. When the two sets of forces are equal, no change will occur and the current state will be maintained, with the line staying in the middle. To create a change, the forces must be modified to move the center line.

Strengthening the driving forces supporting a change often leads to a reaction that reinforces the opposing forces. It is often more effective to develop ways to reduce or eliminate the opposing forces.
Cause & Effect “Fishbone” Diagram

What is its Purpose?
A cause and effect diagram allows a team to identify, explore, and graphically display, in increasing detail, all of the possible causes related to a problem, sorted into categories.

What does it accomplish?
- Enables a group to focus on the content of the problem rather than its history or the group’s members’ personal interests.
- Focuses the group broadly on causes, not symptoms.
- Opens up a group whose thinking has fallen into a rut.

How do we do it?
1. Agree on a problem statement — identify the “effect” whose causes you want to identify.
2. Brainstorm the major categories of causes of the problem or effect. If this is difficult, use generic headings: Methods, Machines (or Facilities, or Equipment), People (Human Resources), Materials, Measurement, and Environment. Or, if it is more appropriate, replace one of these with Policies.
3. Write the problem (effect) on a flipchart or board at the center right, and draw a box around it, and draw a horizontal arrow to the left running to it. Write the categories of causes as branches running into the main arrow.
4. Brainstorm all possible causes of the problem, asking “why does this happen?” Write each idea a sub-cause branching from the appropriate main cause. (Write sub-causes in several places if there are multiple relationships.)
5. Ask again, for each sub-cause, “why does this happen?” Write sub-sub-causes branching off the sub-causes. Continue asking “why?” to generate deeper levels of causes.
6. When ideas in one area become scarce, focus on places in the fishbone where branches are few.
Pareto Analysis

- **What is its Purpose?**
  A Pareto Analysis allows a team to focus on the problems that offer the greatest potential for improvement by showing their relative frequency or size.

- **What does it accomplish?**
  It helps a team to focus on the causes that will have the greatest impact if solved.

  Based on the proven Pareto principle: 20% of the sources cause 80% of any problem.

- **How do we do it?**
  Decide which problem you want to know more about.

  Choose the most meaningful information you want to study such as frequency or cost.

  Choose the time period for the study.

  Gather the necessary data.

**Sample:**

**Question:** From the students' point of view, what are the most important factors that contribute to their overall satisfaction with the college?

**Process:**

Gather data from a survey that has students weight various factors on a scale of 1 (low satisfaction) to 10 (high satisfaction).

**Results:** Tally of Votes (sample of 10 students) (Top Three) and draw the Pareto Chart

<table>
<thead>
<tr>
<th></th>
<th>Points</th>
<th>Number of Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Quality of Instruction</td>
<td>8,8,8,6,7,5,3,2,6,8</td>
<td>61</td>
</tr>
<tr>
<td>B. Availability of current technology support</td>
<td>8,8,7,6,4,3,1,1</td>
<td>38</td>
</tr>
<tr>
<td>C. Classroom Physical Environment</td>
<td>1,3,2,6,4,8</td>
<td>24</td>
</tr>
</tbody>
</table>

![Pareto Chart](chart.png)
Issue Bin (Parking Lot)

- Topics that will be addressed later, or should be on future agendas
- Questions that can or should be deferred until the end of the agenda, meeting, or session ("We can park this issue on the Parking Lot for now, making sure we return to it later.")

A good method for creating an Issue Bin is to tape a sheet of flipchart paper to the wall, label it ("Issue Bin" or "Parking Lot") and write on it, with a marker, any question or issue that needs to be addressed later but would interrupt the flow of discussion if taken up immediately.
PLUS/Delta (+/Δ)

What is its purpose?
A Plus/Delta allows a team, group, or committee quickly to gather feedback from its participants on what it has been doing well and what it could do better. The name, intentionally more positive than Plus/Minus would be, uses delta, the Greek letter that symbolizes change in mathematics, to highlight the team’s opportunities for improving how it does its work. The process can take as few as five minutes.

What does it accomplish?
By encouraging participants to reflect on “what worked well” and “what could work better” while their experience is fresh in their minds, the Plus/Delta serves as feedback for a group’s future activities and development. It presents the positives and negatives of a situation so that everyone can recognize and preserve the exemplary characteristics of the group’s work, while making all participants conscious of the need for improving other attributes. Used midway through a long meeting, it can correct problems quickly.

What can it cover?
A Plus/Delta includes any topic a member of the group suggests: the agenda and planning; the materials provided; the physical setting, food, and refreshments; the behaviors of the participants; the value of the group’s activities in helping it achieve its goals; etc. The moderator doing the Plus/Delta should not attempt to steer the group toward certain categories of comments, or to edit items offered (beyond making sure each is clear enough for everyone to understand). The group’s honest views are the goal of a Plus/Delta.

How do we do it?
1. Draw a large "T" on a flipchart. Use the whole page, with the upright line of the "T" dividing it in half. At the top left side, above the crossbar of the "T," write a large "+" (plus). At the top right, write a large "Δ" (delta).

2. Brainstorm the things that “we think worked well” and list them on the left side.
   Ask group members to volunteer plus items, going around the circle, asking each participant to contribute. Keep going, passing (after the first round) those who run out of comments, until the group runs out of pluses.
   If someone begins offering a negative, ask them to “hold it” for the delta side. Keep the opening plus discussion positive and upbeat. If a mixed comment comes up, isolate the positive portion for the plus side, and hold the negative for later.

3. Then brainstorm the things that “we'd like to change or see changed” and list them on the right side. Don't ask for negatives or weaknesses or problems, but changes.
   Give everyone a chance to contribute, but don't expect the number of deltas to equal the pluses. When you first ask for deltas, expect to endure a long silence. Be patient, waiting for the group to contribute. Don’t short-circuit the process by offering your own deltas, or by prematurely announcing that “nothing needs changing.” There are always possibilities for improvement.

4. Copy or preserve the flipchart lists, type them up, and include the Plus/Delta results with the minutes or report of the meeting.
STUDENT FOCUS


How Does Student Focus Work?

This instrument proposes a series of actions that, when taken together, represent a truly exceptional student-centered organization. Some of these actions you won’t need because they are already standard practice within your institution. Others may not be so appropriate to what you do for your students. The gems for you will be the behaviors that provide your faculty, staff, and administrators with a Student Focus that give your students what they need so effectively that they coming back for more.

Step 1: Take the “Student Focus Test.”

Score this test for your institution using this key:

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>Agree</td>
<td>Slightly agree</td>
<td>Slightly disagree</td>
<td>Disagree</td>
<td>Strongly disagree</td>
<td></td>
</tr>
</tbody>
</table>

to rate your level of agreement with the statements by placing a number in the box to the left of each, thereby seeing which principles of exceptional student service represent your best targets of opportunity for improvement.

If a statement is Not applicable in your situation, mark it "NA"

For this exercise you take this test privately, but it will be of greater value for you when you share your results with the group of people whose joint goal is to intensify your Student Focus.

Step 2: Grade your “Student Focus Test.”

Total your Student Service Score (add four points for each NA):

<table>
<thead>
<tr>
<th>Score</th>
<th>Grade</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>96-100</td>
<td>A+</td>
<td>Your institution will have your own chapter in the next great student service book.</td>
</tr>
<tr>
<td>90-95</td>
<td>A</td>
<td>Your institution is a model for American higher education to follow.</td>
</tr>
<tr>
<td>86-89</td>
<td>B+</td>
<td>Your students must love to deal with you.</td>
</tr>
<tr>
<td>80-85</td>
<td>B</td>
<td>Your students must be pleased with your treatment of them.</td>
</tr>
<tr>
<td>70-79</td>
<td>C+</td>
<td>This is solid but not great student service, with opportunity for gain.</td>
</tr>
<tr>
<td>70-75</td>
<td>C</td>
<td>This isn’t too shabby a score, but one with lots of opportunity for gain.</td>
</tr>
<tr>
<td>66-69</td>
<td>D+</td>
<td>This is a shabby score; opportunity for gain is immense.</td>
</tr>
<tr>
<td>60-65</td>
<td>D</td>
<td>You’re bordering on student abuse.</td>
</tr>
<tr>
<td>0-59</td>
<td>F</td>
<td>Your students must need you badly to be still sticking around.</td>
</tr>
</tbody>
</table>

Student Focus Test
1. We have an ambitious, inspiring, widely known, and widely accepted student service vision statement. It makes a clear declaration of how we value our students as well as how we pledge to serve them.

2. Administration "walks the talk" on student focus. It fully supports faculty and staff efforts to provide exceptional service to students and to realize the student service vision of the institution.

3. We go out of our way to hire faculty and staff who are emotionally, culturally, and intellectually prepared to provide our students with the nature and the quality of services they expect, require, and deserve.

4. Our new faculty, staff, and administrators are thoroughly oriented to our student-focused culture. We baptize them with the waters of our student service vision before we turn them loose on students.

5. Our faculty, staff, and administrators receive clear statements of expectations for the kind of performance regarding students that we insist upon in fulfillment of our student service vision. As a result, they know just how to handle student service situations as they arise.

6. Our faculty, staff, and administrators are fully trained in all aspects of their work, particularly in how to meet the expectations we have for their performance in student-focused activities.

7. We treat our faculty, staff, and administrators so well, and lead them with such thoughtfulness, inspiration, and compassion that they act as our partners to provide exceptional student service rather than as hired hands just going through the motions to earn their pay. In other words, we give them good reasons to have emotional ownership of our student service goals.

8. We hold faculty, staff, and administrators accountable for achieving our expectations in serving our students. They receive periodic performance reviews and other forms of abundant feedback, both positive and negative, that help them stay on track.

9. We embark on continuous student service improvement. We practically beg our faculty, staff, and administrators for their ideas on how we can serve students better, faster, or more effectively. We listen to those ideas and we use the ones that work.

10. On the telephone and in person, our faculty and staff use language and behavior that bond them to our students, and they avoid language and behavior that might alienate students or put them off.

11. We don't allow students to ask more than once for what they need before we swing into action to give it to them. As soon as any administrator, faculty, and staff learns of a student need, that administrator, faculty, and staff feels personally responsible to see that it is met.

12. Our students don't have to lift a finger to get exceptional service. We make the call, fill out the form, check the records, correct the mistake, and otherwise go the extra mile to keep them happy and free to focus their attention on their studies.
13. Student complaints are resolved quickly, responsively, competently, happily, generously, and, if we made an error, remorsefully. When we don't get it right the first time, we make sure we get it right — even more than right, when possible — the second time.

14. We serve each other — our internal customers — as professionally, as responsively, and as faithfully as we serve our students. Our various departments and divisions meet each other’s needs quickly and fully.

15. We act every day as though we are on the verge of losing each of our students. As a result we treat them warmly, courteously, and appreciatively. We treasure them.

16. We are honest with our students. We keep them informed. We empower them to make good decisions. We don't mislead, manipulate, or deceive them.

17. We under-promise and over-deliver. We exceed our students’ expectations at every opportunity. We do the little things that mean a lot. We dazzle our students by personalizing and customizing our service.

18. Our faculty, staff, and administrators recognize and act with the understanding that students do not buy our programs, courses, and services. They pay us to help them acquire the knowledge, skills, and abilities which represent solutions to their problems, personal gain, gratification of their needs, achievement of their goals, reduction of their pain, or expansion of their profits.

19. We listen to our students in order to understand what they need from us and how well we're providing it. We may do this through post-service calls and high-ranking visits, or student surveys, conferences, focus groups, and research studies. We act on what we hear from these sources to improve students' experiences with us.

20. We "partner" with our students. We are student-centered. Rather than pushing our programs, courses, and services on them, we learn where they're headed and we help them get there.
SYSTEMS CHARTING

What is its purpose?

Systems Charting is a technique useful for helping a group of people think critically about the complicated systems and processes that underlie institutional organization and activities, the systems and processes that support (or hinder) achievement of an institution's goals. It provides a group with a valuable method for understanding a complex system from a variety of perspectives, and is best done with a heterogeneous group of individuals who see or use the system under examination in different ways.

Systems Charting should be utilized early in any improvement effort. It is a discipline for making explicit our shared understanding of a particular higher education function, using a systems thinking approach that:

- shows the interdependence of processes within the larger system,
- spells out the relationships among people within the system,
- clarifies the identities of stakeholders, both external and internal, and
- highlights critical processes and the indicators of success.

Systems Charting is a messy, iterative, trial-and-error exploration of a system, not a precise algorithm that invariably leads to a settled analysis. Using the technique requires a toleration of ambiguity that some may find difficult. People who want quick, clear, simple solutions to complex problems may have to learn to develop the patience that effective use of this tool requires.

What does it accomplish?

Creating a systems chart is a process for getting a "rough first cut" at the series of processes that comprise the systems underlying a particular area of potential improvement. It is meant to serve as a form of creative thinking that helps a group thinking about an improvement to identify the various underlying or affected processes and their corresponding inputs, outputs, and the receivers or customers of the outputs. (To simplify the chart somewhat, suppliers of the inputs are not included, although they could be easily added.)

Who should do Systems Charting?

Systems charting needs to be done by a group of people who can see a potential improvement project from a variety of perspectives. The more diverse the team, the more likely the charting process will "bubble up" all of the various processes and pieces upon whose understanding the success of the project will depend. Some People to Involve in Analyzing a System:

A. Key staff that represent the management of all of the critical processes within the system (i.e., the process managers)
B. Staff that provide products and services (i.e., are suppliers) to those working within the system
C. Staff that are internal customers of the system or have contact with stakeholders served by the system
D. Staff that are responsible for collecting and tracking information about the system and its component processes
E. Stakeholders served by the system
F. Any other decision-makers whose approval is required to change the system or its component processes
How do we begin Systems Charting

Most people find it easiest to begin a systems chart by listing outputs, the things produced in examining whatever the target of improvement might be. But the process of systems charting is an iterative one, and it is reasonable to begin anywhere, say by first identifying a process, then its inputs and outputs, then the customers for its outputs. Or by beginning with customers, then working back to the left through the outputs, processes, and inputs used to satisfy those customers.

- Systems charting is not an orderly process, nor is it intended to be: it is a form of brainstorming, where the presence of all these different processes on a single chart stimulate thinking about the variety of processes and pieces that interact — and must be factored into an improvement effort.

- Remember that the particular items listed on a systems chart are just a beginning, and many additional items might be listed in each category. The longer a team works at creating a chart of the process and systems underlying their improvement project, the more they will understand the scope, complexity, and appropriate strategies for accomplishing their goal.

Directions for Charting Systems

1. Choose a system at your institution that you know will need to be improved in order to make this Action Project succeed. You will chart the system, as it exists in its current state, so it may be helpful to choose a system that the majority of your team members know and understand. (You can chart multiple systems if your Project requires.)

2. Write each item below in the appropriate box on your systems chart. Don’t worry about keeping the chart neat and precise. Systems Charting is a messy business; if you need to cross out an item, cross it out, and don’t worry about it.

   A. List one or two outputs of the system. What concrete services and products does it create? Often an output will take the form of a report, a list, a policy, a decision, or an event.

   B. Categorize one or more stakeholder groups that need, use, or want the outputs you have listed. Connect each output to its stakeholders with a thin line. Who are both the external and internal recipients of each of the system’s services and products? Be specific rather than generic in identifying stakeholder groups: sophomore women, English composition faculty, employers of AAS alumni, Registrar office workers, etc.

   C. Brainstorm and list the processes that produce the outputs you have listed. Draw thin lines to connect each process with its output(s). What activities create the things these stakeholders want and need? If possible, list processes in roughly sequential order, with earlier processes at the top and final processes below.

   D. Fill in the inputs to the system. Examine each process on your list, thinking of the specific inputs it requires to operate successfully. Use lines to connect each process with its required inputs. What people, equipment, facilities, information, funding, policies, materials, and other items do these processes need to succeed? Be specific rather than generic: trained counselors rather than just people, $20,000/year rather than simply money, four rooms and a laboratory rather than just space, etc.

   You could also list the suppliers of each input, connecting each to its input with a line. Who provides the inputs the system requires to succeed? It may be convenient to identify internal sources for some categories: the personnel office (for faculty and
staff), the budget (for money and equipment), acknowledging that these are conduits for these particular inputs rather than the actual sources themselves.

As you go through each of these four steps, you will probably identify new items for the boxes already completed. Run through steps A - D again and fill in additional items.

### Systems Thinking Principles

1. A system is made up of a group of interrelated processes.
2. A system may serve a variety of stakeholders.
3. Processes and tasks affect one another in a variety of complex ways.
4. Improving a process requires understanding everything that affects it, including other processes.
5. Individuals and departments at any institution must always remember that they are interdependent parts of a larger system.

### Adding Measures to Your System Chart

You can also add measures to your Systems Chart, and to begin to discuss the various ways in which using measurement can improve performance.

First identify indicators that you currently use to assess the performance of your system. List only the indicators that you collect systematically and actually use to assure or evaluate system performance. Exclude potential or desirable indicators not now available. Write the indicators below in the bottom row of smaller boxes on your Systems Chart. (You may want to write each item on a sticky note so you can move them around.)

- **Satisfaction**: Identify any ongoing indicators that you systematically gather from stakeholders (external and internal) and use to determine whether the services and products the system produces satisfy their needs.

  If you have no expected requirements your outputs must meet, you probably have not yet developed measures of achievement.

- **Output**: Identify indicators that gauge whether the services and products you produce meet the target requirements you have established for them.

- **Process**: What indicators or information do you collect and analyze regularly to make sure your processes are operating as they were designed or supposed to operate?

  Process measures are leading indicators that may predict in advance whether the outcomes of a process will be successful or not. By contrast, Output and Satisfaction measures are lagging indicators, telling you whether a process was successful only after it is completed.

- **Input**: Identify the ongoing indicators that you regularly track to determine how effectively suppliers and supplies meet the needs of processes.

### Terms for Talking about Systems

| Stakeholders | individuals and groups that have a stake in a system or process, whose expectations and requirements must be satisfied for them |

<table>
<thead>
<tr>
<th>Outputs</th>
<th>the results of work — the tangible services and products a process produces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process</td>
<td>the method(s) by which work is accomplished</td>
</tr>
<tr>
<td>Inputs</td>
<td>who and what a process requires to work</td>
</tr>
<tr>
<td>Process manager</td>
<td>whoever runs and controls a process and is empowered to change it</td>
</tr>
<tr>
<td>Satisfaction Indicators</td>
<td>indicators of how well stakeholders’ expectations are met</td>
</tr>
<tr>
<td>Performance Indicators</td>
<td>all the indicators — satisfaction, input, output, process — of how well a system or process is working</td>
</tr>
<tr>
<td>Input indicators</td>
<td>measures of how well inputs conform to what a process requires to succeed</td>
</tr>
<tr>
<td>Process indicators</td>
<td>measures of whether a process is running well and is likely to produce the desired output</td>
</tr>
<tr>
<td>Outcome indicators</td>
<td>measures of whether the output of a process is what it should be</td>
</tr>
</tbody>
</table>
"SIR PORC": S - Suppliers, IR - Input Requirements, P - Process, OR - Output Requirements, C - Customers

Feedback concerning actual inputs provide suppliers with specifications of exactly what kind of ideal inputs are needed

Processes use inputs to produce outputs

Feedback from receivers of products or services provide specification of exactly what kind of ideal outputs are required