OFFICE OF QUALITY IMPROVEMENT

Facilitator Tool Kit

The facilitator tool kit is a comprehensive, easy-to-use guide to tools, methods and techniques for assisting groups with planning and improvement projects and interactive meetings. Its clear, simple explanations and directions lead the reader through the selection and application of practical tools that have been tested with university groups.

Version 2.0, Revised September, 2007
Copyright © 2007 University of Wisconsin System Board of Regents

Edited by: Nancy Thayer-Hart

Many colleagues and partner organizations have contributed their ideas and scholarship to this publication, including:

Kathleen Paris
Ann Zanzig
Maury Cotter
Nancy Thayer-Hart

John Elliott
Institute of Cultural Affairs (ICA)
Darin Harris
George Watson

The Office of Quality Improvement gratefully acknowledges their contributions.

For additional information contact:

Office of Quality Improvement
Room 199 Bascom Hall, 500 Lincoln Drive
Madison, WI 53706-1380
608-262-6843   FAX: 608-262-9330
quality@oqi.wisc.edu
http://www.quality.wisc.edu
## Table of Contents

1. **The Role of the Facilitator**  
   - Introduction  1  
   - Facilitator Responsibilities  1  
   - Facilitation Challenges  1  

2. **Group Dynamics**  
   - Stages of Group Development  2  
   - Group Conflict  2  
   - Team Behaviors  3  
   - How to Intervene in Difficult Situations  4  

3. **Ideation and Consensus**  
   - The Art of Listening  7  
   - Focused Conversation Method  9  
   - Appreciative Inquiry  10  
   - Brainstorming Techniques  13  
   - What is Consensus?  15  
   - Affinity Process  15  
   - Consensus Workshop  16  

4. **Effective Meetings**  
   - Potential Influences  18  
   - Before, During, and After  19  
   - Roles and Rules  20  
   - Jump-Starting a Stalled Meeting  21  

5. **Managing a Project**  23  

6. **Stakeholder Input Tools**  
   - Focus Groups  25  
   - Web Survey Options  29  

7. **Data Collection and Analysis Tools**  
   - Data Collection Basics  31  
   - Check Sheets  32  
   - Importance/Satisfaction Diagram  33  
   - Root Cause Analysis  36  
   - SWOT Analysis  39  
   - Functional Analysis  39  
   - Additional Data Analysis Tools  41  

8. **Flowcharting**  
   - Definition  42  
   - How Flowcharts Can Help  43  
   - Flowchart Types  43  

9. **Decision-Making Tools**  
   - The Decision-Making Process  45  
   - Criteria Matrix  47  
   - Force Field Analysis  49  
   - Dot Voting  49  
   - ‘Zero to Ten’ Rating Method  50  
   - Impact/Effort Matrix  51  

10. **Measuring Impact**  
    - Functions of Impact Measures  53  
    - Why Measurement Systems Fail  53  
    - Limitations of Measurement Systems  54  
    - Metrics on Campus  55  
    - Tools for Developing Measures  56
How to Use This Tool Kit

Throughout the *Facilitator Tool Kit*, you will see the icons below.

The template icon alerts you to the fact that a template for the tool being described is available as an Appendix.

The “thought bubbles” are tips or extra bits of information.

The Office of Quality Improvement is happy to respond to questions and assist UW-Madison faculty and staff in using any of the tools. Please email quality@oqi.wisc.edu or call 262-6843.
THE ROLE OF THE FACILITATOR

Introduction
In a university setting, collaboration and consensus are essential ways of working. Simple in concept but not so easy to achieve, creating an environment where groups can be productive and effective in achieving their goals is a facilitator’s primary role.

Facilitate means “to make easy.” As a facilitator, your job is to make the meeting easier for the participants. Your main task is to help the team or group increase its effectiveness by improving its processes. A facilitator manages the method of the meeting, rather than the content. Facilitators are concerned with how decisions are made instead of what decisions are reached.

Facilitator Responsibilities
- Intervene if the discussion starts to fragment
- Identify and intervene in dysfunctional behavior
- Prevent dominance and include everyone
- Summarize discussions and conversations
- Bring closure to the meeting with an end result or action

Facilitation Challenges
- Continually focusing on and attending to the group
- Being comfortable with ambiguity and information overload
- Processing misperceptions and emotional reactions
- Focusing exclusively on process rather than content
- Helping the group develop so they can ultimately work without facilitation
GROUP DYNAMICS

Stages of Group Development

The diagram in Figure 1 depicts the stages that most groups will go through as they work together (Tuckman, 1965). A team may experience more than one stage at the same time. Understanding these stages of development will help you as a facilitator.

DESMIRE TO BE A WINNER 

FORM

Goal: "Count me in."
Task: Orientation
Concern: Inclusion

Goal: "We're all in charge."
Task: Organization
Concern: Control

Goal: "Speak your mind."
Task: Communication
Concern: Openness

Goal: "We're succeeding!"
Task: Collaboration
Concern: Success

Characteristics of a Successful Team:
- Gets the job done
- Openness, team work
- Members are in charge
- Members want to be on the team

Initial Concerns:
- Will we succeed?
- Will we be open?
- Will I have some degree of control?
- Do I want "in"?

Figure 1. Stages of Group Development

Group Conflict

Conflict can be healthy in a group. It shows that members are taking ownership and sharing their ideas honestly. However, there are times
when healthy conflict escalates and ceases to be constructive. Since emotions resulting from conflict tend to intensify over time, it is important to address the conflict as soon as it begins to become unhealthy. The conflict continuum in Figure 2 (source unknown) illustrates the differing levels of conflict and when intervention or more direct action may be needed.

<table>
<thead>
<tr>
<th>Differ on Approaches and Opinions</th>
<th>Emotional Disagreements</th>
<th>Physical Combat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy</td>
<td>Established Positions</td>
<td>Intervene</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Big Trouble!</td>
</tr>
</tbody>
</table>

*Figure 2. Conflict Continuum*

**Team Behaviors**

Recognizing and understanding typical team member behaviors – both constructive and destructive – will be very helpful to you as a facilitator (Brunt, 1993). These behaviors can affect team development and performance. Members of the team may exhibit these behaviors at varying times throughout the development cycle of the team. Keep in mind that a facilitator needs to model constructive behaviors to help the team reach its goals.

**Constructive Team Behaviors**

- **Cooperative** - interested in the views and perspectives of the other team members and is willing to adapt for the good of the team
- **Clarifying** – clearly defines issues for the group by listening, summarizing, and focusing discussions
- **Inspiring** – enlivens the group, encourages participation and progress
- **Harmonizing** – encourages group cohesion and teamwork. For example, may use humor as a relief particularly after a difficult discussion
- **Risk Taking** – willing to risk possible personal loss or embarrassment for the team or for project success
- **Process Checking** – questions the group on process issues such as agenda, time frames, discussion topics, decision methods, use of information, etc.
**Destructive Team Behaviors**

- **Dominating** – takes much of the meeting time expressing self-views and opinions. Tries to take control by use of power, time, etc.
- **Rushing** – encourages the group to move on before task is complete. Gets tired of listening to others and working as a group.
- **Withdrawing** – removes self from discussions or decision-making. Refuses to participate.
- **Discounting** – disregards or minimizes team or individual ideas or suggestions. Severe discounting behavior includes insults, which are often in the form of jokes.
- **Digressing** – rambles, tells stories and takes group away from primary purpose.
- **Blocking** – impedes group progress by obstructing all ideas and suggestions. “That will never work because...”

**How to Intervene in Difficult Situations**

Sometimes it will be necessary to intervene with a particular individual or an entire team because of behavior or actions during team meetings. An intervention will include any statement, question or nonverbal behavior made by a facilitator that is designed to help the group.

The goal of any type of intervention is to maintain the group’s autonomy and to develop its long-term effectiveness. Eventually, the interventions used by a facilitator should decrease the group’s dependence on the facilitator.

An intervention is never an easy task, so it is important to recognize when to intervene and whether to intervene with an individual or the entire team. There is no set time or tried and true method for when or how to intervene, but the following list of questions will help decide whether an intervention may be appropriate:

**Questions to Ask Yourself**

- Can I identify a pattern?
- If I do not intervene, will another group member?
- Will the group have time to process the intervention?
- Does the group have sufficient experience and knowledge to use the intervention to improve effectiveness?
- Is the group too overloaded to process the intervention?
- Is the situation central or important enough to intervene?
- Do I have the skills to intervene?
The approaches and methods listed below will provide the facilitator with some options and alternative types of interventions to use depending on the situation.

**Intervention Approaches**

- **Prevention** – Before the first meeting, take time to introduce yourself, understand the needs of each team member, and establish rapport and credibility with each individual. You may also wish to survey members about a particular issue that the team will be addressing. Early in the first meeting, establish ground rules to guide how the group will work together. Ground rules are useful in setting common expectations for behavior and provide a basis for team members to regulate each others’ behavior.

- **Non-intervention** – It is important not to overreact, so it may be appropriate to ignore isolated moments of non-productive behavior. However, if the group’s momentum has been broken, it might be a good time to take a break, which will give the person time to cool off.

- **Low-level intervention** – There are several techniques that can be employed at this level to change behavior in a non-threatening way and prevent it from escalating to a serious disruption.
  1. Embrace the person’s concerns. Listen so intently and repeat back what you’ve heard so accurately that the person feels he/she has been heard. Ask questions that test assumptions, reveal biases, and bring out important data.
  2. Break into small groups to work on the task that was interrupted.
  3. Address the problem as a group concern, referring back to ground rules and naming the tension between the differing needs you’ve heard in the group.
  4. Remind the group of the task at hand, and that the goal is to work collaboratively to develop a win-win solution.
  5. Use the occasion as an opportunity to increase the group’s capacity for working together effectively by teaching a concept or method from change management or group development theory.

- **Medium-level intervention** – Speak to the individual at a break about his/her needs and interest in the process. Remind him/her that the team has been charged with working collaboratively to achieve specific outcomes, and if the team does not make satisfactory progress, someone else will do it for them.

- **High-level intervention** – When a team member’s behavior escalates to the point where high-level intervention is necessary, both the success of the team and the standing of the facilitator are at risk.
To work through an impasse that may be causing high levels of frustration for one or more team members, invite individuals to describe how they feel about being stuck. Shift the group’s focus temporarily to the process of how to define the problem, establish criteria, make decisions, etc. Restate the issue, break it into smaller questions, look for shared concerns, articulate areas of agreement and ask the group to confirm. Help the team identify new options, exploring the very positions that are dividing them as potential sources for a solution.

If a team member’s behavior continues to disrupt and threaten the progress of the team, the facilitator can publicly name the behavior and ask the group how it wishes to handle the situation.
Ideation and Consensus

A facilitator who listens well and helps group members listen to each other creates an environment where people can do their best thinking and more easily find common ground. This chapter includes tips for improving listening, techniques for generating creative ideas and approaches for helping groups reach consensus.

The Art of Listening

How often in our daily conversations do we really listen beyond our own thoughts to understand what another person means? And how rarely do we listen deeply enough to sense the motive and emotion behind the words? Yet getting beyond an introspective position is the first step in working with others in a collaborative way. Understanding and being able to employ three levels of listening (Whitworth, Kimsey-House, Kimsey-House & Sandahl, 2007) is an essential skill for facilitators:

- Listening to self (own thoughts)
- Listening for meaning (content)
- Listening for depth (intent, emotion, intuition)

What behaviors and techniques can help us listen at a deeper level?

- Presence – Concentrate on the conversation. Consciously center yourself, being aware of bodily sensations such as breathing and stance. Listen at a slight distance, using “soft eyes and soft ears” – this means listening without judgment, visibly conveying warmth and compassion. If you are kinesthetic, hold an object to help you concentrate.

- Comfort with Silence – Slow down, allowing more space between thoughts, especially when much emotion is present. Be intentional about pauses or even saying, “Let’s take a moment to think about this...”

- Working with That Inner Voice – Begin to notice the “chatter” playing in the background of your mind during meetings and conversations. Recognize when your inner voice is helpful and based on intuition, versus when it is sabotaging your efforts to understand
the other person. Bring personal thoughts forward by asking permission or forming an inquiry, rather than stating them as fact.

- **Active Listening** – We too frequently leap VERY quickly from unformed, abstract ideas to conclusions. Using the active listening techniques listed in Figure 3 can be helpful in checking assumptions, clarifying our own thoughts, and understanding others.

<table>
<thead>
<tr>
<th>TECHNIQUES</th>
<th>Purpose</th>
<th>Approach</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENCOURAGING</strong></td>
<td>To convey interest</td>
<td>Don’t agree or disagree with speaker.</td>
<td>I see...</td>
</tr>
<tr>
<td></td>
<td>To keep the person talking</td>
<td>Use non-committal words with positive tone of voice.</td>
<td>Uh-huh...</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>That’s interesting...</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tell me more about...</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Go on...</td>
</tr>
<tr>
<td><strong>RESTATING</strong></td>
<td>To show that you are listening and understanding.</td>
<td>Restate the speakers’ basic ideas.</td>
<td>If I understand, your situation is...</td>
</tr>
<tr>
<td></td>
<td>To help speaker grasp the facts</td>
<td>Put in your own words.</td>
<td>In other words, your decision is...</td>
</tr>
<tr>
<td><strong>REFLECTING</strong></td>
<td>To show you are listening and understanding</td>
<td>Reflect the speakers’ basic feelings.</td>
<td>You feel that...</td>
</tr>
<tr>
<td><em>The power of silence should not be underestimated.</em></td>
<td>To let speaker know you understand how he/she feels.</td>
<td>Put in your own words.</td>
<td>You were pretty disturbed about that...</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>You believe that...</td>
</tr>
<tr>
<td><strong>SUMMARIZING</strong></td>
<td>To pull important ideas, facts, etc. together.</td>
<td>Restate, reflect, and summarize major ideas and feelings.</td>
<td>These seem to be the key ideas you expressed...</td>
</tr>
<tr>
<td></td>
<td>To establish a basis for further discussion</td>
<td></td>
<td>If I understand you, you feel this way about this situation.</td>
</tr>
<tr>
<td></td>
<td>To review progress</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Figure 3. Active Listening Techniques*
Focused Conversation Method*

The Focused Conversation Method developed by the Institute of Cultural Affairs (http://www.ica-usa.org/about-us.htm) helps a group discuss almost anything and move toward a decision. Focused Conversation is a questioning technique used in both teaching/learning activities and in day-to-day work situations. The nature and sequence of the questions progress in four stages that give the tool its nickname, “ORID”: **Objective → Reflective → Interpretive → Decisional.** Figure 4 summarizes the four levels.

### OBJECTIVE

<table>
<thead>
<tr>
<th>Focus of the questions</th>
<th>Data, the “facts” about the topic, external reality, sensory impressions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit to the group</td>
<td>Ensures that everyone deals with the same body of data and all the aspects</td>
</tr>
<tr>
<td>Questions relate to</td>
<td>The senses: what is seen, heard, touched, etc.</td>
</tr>
<tr>
<td>Key questions</td>
<td>What objects do you see? What words or phrases stand out? What happened?</td>
</tr>
<tr>
<td>Traps and pitfalls</td>
<td>Asking closed questions, or questions not specific enough; no clear focus. Ignoring objective questions because “they are too trivial”</td>
</tr>
<tr>
<td>If this level is omitted</td>
<td>There will be no shared image of what the group is discussing; the various comments will seem unrelated</td>
</tr>
</tbody>
</table>

### REFLECTIVE

<table>
<thead>
<tr>
<th>Focus of the questions</th>
<th>Internal relationship to the data, personal reactions, associations, images, emotions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit to the group</td>
<td>Reveals its initial responses</td>
</tr>
<tr>
<td>Questions relate to</td>
<td>Feelings, moods, emotional tones, memories or associations</td>
</tr>
<tr>
<td>Key questions</td>
<td>What does it remind you of? How does it make you feel? Where were you surprised? Where delighted? Where did you struggle?</td>
</tr>
<tr>
<td>Traps and pitfalls</td>
<td>Limiting the discussion to an either/or survey of likes and dislikes</td>
</tr>
<tr>
<td>If this level is omitted</td>
<td>Those who rely on intuition, memory, emotion and imagination feel ignored</td>
</tr>
</tbody>
</table>
### INTERPRETIVE

<table>
<thead>
<tr>
<th>Focus of the questions</th>
<th>The life meaning of the topic, values, significance, purpose, implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit to the group</td>
<td>Draws out the significance from the data for the group</td>
</tr>
<tr>
<td>Questions relate to</td>
<td>Layers of meaning, purpose, significance, implications, “story” and values. Considering alternatives, options</td>
</tr>
<tr>
<td>Key questions</td>
<td>What is happening here? What is this all about? What does all this mean for us? How will this affect our work? What are we learning from this? What is the insight?</td>
</tr>
<tr>
<td>Traps and pitfalls</td>
<td>Abusing the data by inserting pre-cooked meaning; intellectualizing, abstracting; judging responses as right or wrong</td>
</tr>
<tr>
<td>If this level is omitted</td>
<td>Group gets no chance to make sense out of the first two levels. No higher-order thinking goes into decision-making</td>
</tr>
</tbody>
</table>

### DECISIONAL

<table>
<thead>
<tr>
<th>Focus of the questions</th>
<th>Resolution, action, new directions, next steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit to the group</td>
<td>Makes the conversation relevant for the future</td>
</tr>
<tr>
<td>Questions relate to</td>
<td>Consensus, implementation, action</td>
</tr>
<tr>
<td>Key questions</td>
<td>What is our response? What decision is called for? What are the next steps?</td>
</tr>
<tr>
<td>Traps and pitfalls</td>
<td>Forcing a decision when group is not ready or avoiding pushing group for decision</td>
</tr>
<tr>
<td>If this level is omitted</td>
<td>The responses from the first three levels are not applied or tested in real life</td>
</tr>
</tbody>
</table>

*Figure 4. Levels of “ORID” Questions*

**Appreciative Inquiry**

Appreciative Inquiry (Hammond, 1996) is a process designed by organizational development specialists as a tool to help create and support sustainable change by identifying organizational assets to use as models of best practice for others. Rather than studying and addressing existing problems and focusing on solutions – an inherently negative
experience – Appreciative Inquiry begins by helping groups in shared work settings systematically explore past successes to create models for future success. Figure 5 compares Appreciative Inquiry with a typical problem-solving approach (Hammond, 1996).

<table>
<thead>
<tr>
<th>Problem Solving</th>
<th>Appreciative Inquiry</th>
</tr>
</thead>
<tbody>
<tr>
<td>• “Felt Need” – Identification of Problem</td>
<td>• Appreciating and Valuing the Best of “What Is”</td>
</tr>
<tr>
<td>• Analysis of Causes</td>
<td>• Envisioning “What Might Be”</td>
</tr>
<tr>
<td>• Analysis of Possible Solutions</td>
<td>• Dialoguing “What Should Be”</td>
</tr>
<tr>
<td>• Action Planning (Treatment)</td>
<td>• Innovating “What Will Be”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Basic Assumption</th>
<th>Basic Assumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>An organization is a problem to be solved.</td>
<td>An organization is a mystery to be embraced.</td>
</tr>
</tbody>
</table>

*Figure 5. Two Approaches to Organizational Change*

Central to the Appreciative Inquiry method is a belief that pride in one’s organization is a largely untapped resource. As individuals, and then groups, review success, they can subsequently create the future to mirror past, best standards of achievement. In such shared planning, people will more readily commit to an energetic process of working toward highest standards. The atmosphere must shift noticeably from problem solving to creating positive, new plans. The resulting set of propositions is the basis for change.

The power of Appreciative Inquiry is that it is an engaged, excited process. It can be used spontaneously (for example, when a discussion becomes stuck on “war stories”) and can become an integrated communications process informed by values of respect and affirmation. The process is continuous and generative by nature which means, simply, that successful ideas will produce further success, particularly when all are invited to participate.

**Steps in the Appreciative Inquiry Process**

1. Facilitator assists group in choosing a topic that is important to the organization. (Example: successful meetings)
2. The group creates a specific focus within the topic. (e.g., agenda planning)
3. In pairs or small groups, people recall past successes in this area and discuss the “conditions” of the success: What was it, how did it happen, how could we do more of this in the future?

4. Examples of small group discussions are shared with all, and the facilitator helps the group move from anticipated “politically correct” examples to those that are based in a genuine, heartfelt pride.

5. Group writes “provocative propositions” related to success. It is important for the entire group to participate and for the facilitator to move the group from individual will to group energy in this step. The provocative propositions are affirmative statements of future expectations of success based on past success that challenge the status quo. These statements should:
   - Challenge or interrupt the current day to day reality
   - Be grounded in past examples
   - Be what everyone really wants
   - Be bold, and stated in the present tense as if the future success were occurring right now. (Examples for “Successful Meetings: Agenda Planning” might be...We brainstorm the next agenda at the end of weekly meetings. Everyone has a chance for input during the week. Revolving facilitators select the top five agenda items according to criteria established by consensus. Meetings always keep to time limits. Additional agenda items are either carried over or discussed in smaller sessions. The status of all items is communicated back in general meeting the following week. Agendas are reviewed and amended at the start of each weekly meeting.)

6. Leaders throughout an organization who have engaged in Appreciative Inquiry should meet and begin to construct a “collage of change” by sharing topics, areas of focus and provocative propositions. Wherever possible, the propositions should be integrated and implemented. Measures and outcomes should be tracked and reported to the entire organization to continue to establish success as a model for continuing change and improvement. (Examples related to “Successful Meetings: Agenda Planning” might be...Five divisions now currently use the same six steps in planning for meetings. The rate of ending on time has increased measurably, 89% of all employees surveyed feel better informed on key issues than they did a year ago, and all managers have been able to note increases in productivity within their departments.)
**Brainstorming Techniques**

Brainstorming helps a group create several ideas in a short period of time. Brainstorming can help a group expand its thinking creatively to include thinking about all the dimensions of a problem or solution. The ideas generated can then be paired down or prioritized using one of the techniques in the “Decision-Making” section of this guide (see [Decision-Making Tools](#)).

Here are some generally accepted ground rules for brainstorming from *The Memory Jogger for Education* (McManus, 1992):

- Never criticize ideas.
- Write every idea on a flip chart. Make sure the words are visible to everyone at the same time to avoid misunderstandings and remind others of new ideas.
- Everyone should agree on the question or issue being brainstormed.
- Record on the flip chart the works of the speaker – ask clarifying questions.
- Do it quickly; 5-15 minutes works well.

Three approaches to brainstorming are explained below.

**Structured Brainstorming**

In this method, also called the “Nominal Group Process,” the facilitator gives group members 5-10 minutes to silently write down their ideas (Delbecq, Vande Ven & Gustafson, 1975). Then the facilitator asks each group member to give one idea (round robin) and records it on a flip-chart. Participants give their ideas in turn or pass until the next round. When all ideas are recorded, participants may ask questions for clarification, but may not argue about validity of the items. Discussion is followed by two rounds of voting. This structured technique often encourages even shy people to participate, but also creates a certain amount of pressure to contribute.

**Unstructured Brainstorming**

In this method the facilitator asks group members to simply give ideas as they come to mind. This can create a more relaxing environment and allows participants to build on each other’s ideas, but there is also a risk that the most vocal group members will dominate the discussion.
**BrainWriting 6-3-5**

When we are faced with a problem to solve or a process to be improved, it is often difficult to think of options that are quite different from what we have always done. BrainWriting 6-3-5 is a silent brainstorming process developed by King and Schlicksupp (1998) that anyone can use to identify new ideas or solutions. The goal is to generate as many creative ideas as possible. The silent work ensures that highly verbal people do not overwhelm quieter members. It also enables individuals to see what others have written.

The tool can be used with groups as small as 6 or as large as 60. The process is conducted in six “rounds” of five minutes or less, and uses a worksheet similar to the one pictured in Figure 6. A full-size template of the BrainWriting Worksheet is provided in [Appendix A](#).

![BrainWriting Worksheet](image)

**Figure 6. BrainWriting 6-3-5 Worksheet**

The question or problem is stated at the top of the worksheet. (E.g. “How can we reduce attrition of our majors?”) To start, each participant writes three ideas, using the three boxes in the top row. The worksheet is passed on to the next participant who adds three more ideas. By the time the worksheet has been passed to the sixth person, it will have 18 ideas and the group of six will have well over 100 ideas.

A variation is to provide a sheet 8.5 x 17” with blank self-stick notes attached. Ideas are written on the notes rather than on a worksheet and can easily be grouped into themes (see [Affinity Process](#)).

After the rotations, each participant is asked to contribute ideas from the worksheet. These are recorded on a flip chart. When all the ideas have been recorded, they are narrowed down to a few priorities. Combining items, grouping into categories, ranking, or voting with stickers may be
used to select ideas for action. The pros and cons of each idea may be discussed. Depending on the situation, more sophisticated prioritizing tools may be used, such as the interrelationship diagram or criteria matrix.

**What is Consensus?**

Voting is majority rule. By definition, someone always wins and someone almost always loses. A group reaches **consensus** when it finally agrees on a choice and each group member can say:

- I believe that others understand my point of view
- I believe I understand others’ point of view
- Whether or not I prefer this decision, I support it (will not undermine it) because it was arrived at openly and fairly and is the best solution for us at this time

The facilitator must “check” for consensus, and not assume that everyone agrees just because opposition is not voiced overtly. Some tactics for checking the level of consensus include:

- Restate the agreement, “The consensus is that we will do XYZ.”
- “Are we all in agreement to go ahead?”
- “Is there anyone who just can’t live with this idea?”
- “What assurances would you need to make this proposal minimally acceptable to you?”

Another simple way to check the level of consensus is to ask participants to use their thumbs to indicate their support for an idea, as follows:

1. **Thumbs Up:** I strongly support this idea.
2. **Thumbs to the Side:** I can “live with” this idea. While it may not meet all of my needs, I don’t have strong reservations.
3. **Thumbs Down:** I cannot live with this idea and have basic concerns that must be heard by the group before we move forward.

**Affinity Process**

The Affinity Process is used to sort qualitative data (i.e., free-form responses) into naturally related groupings, and to identify the one theme, written on a header card, which summarizes how each group is best defined (see Figure 7, below.)
How to Use:

- Explicitly state issue/question/problem being examined through the Affinity process.
- Write each response onto a card or self-stick note. Use clear and complete phrases.
- Sort the cards into related groupings: this is a silent process with all members participating. Continue to group and re-group until all members stop.
- Create concise but complete header cards for each final group. The header should capture the essential link in all the cards below it.
- Debrief the exercise: What are the headers telling us? What is suggested? Discuss any links that may be seen between headers.

Consensus Workshop*

Slightly more structured than the affinity process, yet highly flexible, the Consensus Workshop method is useful whenever a large group of people need to speak, listen to each other, build on each other’s ideas, and reach well-considered conclusions that hold enough agreement to enable the whole group to move forward together.

The Consensus Workshop method emerged out of the Institute of Cultural Affairs’ (http://www.ica-usa.org/about-us.htm) experience with hundreds of people in community development efforts from the 1950s through the 1990s, “coupled with intense ongoing research into how people think, decide, create, innovate, learn, and live” (Miller, 2006). A Consensus Workshop enables even a large group of people to learn from each other as they discuss a complex multi-faceted issue, thereby converting a diversity of perspectives into an asset.
There are five basic steps in the Consensus Workshop: Context, Brainstorm, Cluster, Name, and Resolve.

1. **Set a context** – Post a single open-ended focus question to help participants understand and explore the topic. Questions like, "What innovative, practical actions can we take this year to move us toward our vision?" "What can be done to improve our services to students?" are examples of focus questions typical in a university setting.

2. **Brainstorm in layers** – Start with silent individual brainstorming, and then ask participants to select their personal favorites to share in a small group. Ask small groups to agree on a specified number of distinct ideas to print clearly onto large cards, one idea per card. Invite the small groups to share their answers with the whole group by gradually calling for the cards. As you read each card aloud, show it to the group and post it on the front wall. Make sure to get equal numbers of cards from all the small groups.

3. **Cluster ideas** – When there are about 15 cards on the wall, ask the group to create pairs of cards with similar intent. Move cards with similar ideas together, first in pairs, then in larger groupings, or clusters. Ask each small group to hand up additional cards, a few at a time, until you have all the cards from all the groups. By the last round, most of the remaining cards will contain ideas similar to those already clustered, and the group can easily identify where to place them.

4. **Name the clusters** – After all the cards are placed on the wall in clusters or columns, give each cluster a 3-5 word title that answers the focus question.

5. **Confirm the resolve** – After naming all the clusters, review the titles to ensure clarity. Discuss the overall impact the ideas will have, and confirm that they represent the consensus of the whole group. Gain commitment on immediate next steps.

The Consensus Workshop process is greatly enhanced by using a “Sticky Wall” to which papers and cards will adhere. Sticky Walls may be ordered from The Institute of Cultural Affairs USA, a non-profit group committed to participatory planning, at [http://www.ica-usa.org/store/products.htm](http://www.ica-usa.org/store/products.htm).

*The Focused Conversation and Consensus Workshop are methods of The Technology of Participation®, a registered trademark of the Institute of Cultural Affairs (ICA). For further information or training regarding these methods, please contact ICA at (800)742-4032 or czaleski@ica-usa.org.*
Effective Meetings

Meetings – no other single activity consumes as much time in today’s working world. Planning and conducting meetings that accomplish their aims is a leadership skill worthy of cultivating.

Potential Influences

Seasoned facilitators will tell you that it is not only necessary, but also critical, to check the physical environment, audio-visual set-up, your equipment bag and your briefcase prior to a facilitated session. It’s also helpful to think proactively about other potential influences.

Physical – Make sure the room is available and set up for your needs. Check seating, lighting, technological equipment, print materials, flipcharts, tape, self-stick note pads and paper at least 20 minutes prior to your session.

Professional – If your participants are preoccupied with news or events occurring at the time of your session, it might be effective to begin with a brief conversation or check-in that acknowledges key factors such as a recent administrators’ resignation, death of a professional peer, budget cut, fire on campus, etc...

Group “frame of mind” – Groups take on a collective identity once assembled even if they’ve never met before. Ask the group members to observe the “100 mile rule.” They must pretend they are 100 miles from work or home and cannot be reached or interrupted. Ask their support and assistance in accomplishing goals within the time scheduled. Let them know that they either will get a scheduled break or should exit and return quietly to take care of personal needs.

Facilitator “frame of mind” – No one can predict in advance or prevent a personal distraction such as a severe headache, concern over a sick child, or a sudden, unexpected project deadline. If a clear focus for facilitating is impossible, ask another facilitator to conduct your session. If you plan to tackle the session even with the additional concern, let the group know – very briefly – that you are coming in from other important responsibilities but that you see this session as an opportunity to clear your mind and focus on a very productive agenda.
Before, During, and After

A meeting may be thought of as a three-stage process – before, during, and after. Following are suggestions for making each stage efficient and effective. A Meeting Planner Checklist can be found in Appendix D.

BEFORE the Meeting

- Create an agenda (with input from sponsors, group leaders, and participants). A Meeting Agenda Template can be found in Appendix B.
  - State items in action terms (E.g., “Review plans for XYZ”).
  - Assign a time limit for each item.
  - Assign someone to lead discussion of each item, if not the facilitator.
- Ensure agenda is posted, sent out, and archived as required by the school, college, or department.
- Ensure that appropriate information is circulated with the agenda beforehand (in time to be useful).
- Ensure that room arrangements are made.
- Arrange for note taker and process to distribute minutes afterwards.
- Ensure that member name/address roster is created to facilitate communication after meeting.

DURING the Meeting

- Start the meeting on time.
- Ensure quorum (if required).
- Review agenda.
- Keep discussion focused on agenda items.
- Encourage full participation.
- Help group reach decisions (consensus vs. voting).
- Summarize decisions at the end.
- Agree on action: what needs to be done by whom and by when.
- Draft agenda for next meetings(s).
- Evaluate the meeting. What went well? What could be improved?

AFTER the Meeting:

- Ensure that minutes are produced and promptly distributed to participants and guests. See Appendix C for a
Meeting Minutes template. Figure 8 lists items that meeting minutes typically need to include:

- Ensure that agenda, minutes, and meeting supporting documents are kept together if archiving is required.
- Communicate as needed to ensure that action is happening as agreed.

**Meeting Minutes Typically Need to Include:**

- Date, time, location
- Attendees
- Key points discussed and decisions made
- Voting results (if votes are taken), including who made the motion and who seconded it
- Who is responsible for what follow-up action, by when?

**Roles and Rules**

Having some structure for handling key roles and establishing some guidelines for how participants will interact can help meetings run more smoothly.

**Committee/Team Roles**

Key roles can be filled by designated individuals, or different members can fulfill these roles on a rotating basis. Key roles in many kinds of meetings are:

- **Facilitator** – Takes responsibility for guiding process of discussion and decision-making. Does not ordinarily engage in meeting content.
- **Timekeeper** – Lets everyone know when time for a given agenda item is almost up and is really up.
- **Recorder** – May write on flip chart or PC/projector or overhead to create a visual record of points being made.
- **Participant** – Share responsibility for:
  - Encouraging others to participate. "I would be interested in what others think who haven’t said anything yet."
  - Respecting time limits
  - Noting when ground rules are being violated
Ground Rules
- Are guidelines on how your committee will function
- Should improve effectiveness and efficiency
- Should minimize confusion, disruptions, and conflicts that take away from the real work.
- Each committee should discuss and agree to its own ground rules
- Ground rules should be reviewed and updated annually as new members join

Most groups violate their own ground rules sometimes...
- Any member can remind the committee of particular ground rules
- If a ground rule is broken repeatedly, either discuss with “offender(s)” as a group and/or decide if the rule should be changed

Sample ground rules
- Everyone turns off cell phones.
- We begin and end on time.
- Information shared in meetings can be shared with others unless a member asks that it be kept confidential.
- Consensus or Voting? Decide ahead of time how decisions will be made.

Figure 9. Sample Ground Rules

Jump-Starting a Stalled Meeting
- Go back to the question at hand or goals of the meeting. Restate.
- Summarize what has already been accomplished or agreed to.
- Ask if there are data to support various points of view.
- Try a non-verbal activity – ask people to write (without talking) what they feel is most important of the points being made.
- Take a break for 5 minutes.
- Ask for a new approach – let the committee members be responsible for getting things moving.
- Ask what issues “drive” the others? Try to separate causes from effects.
- Prioritize items with stickers or check marks and deal only with high-scoring items
What About the Meeting Dominators?

- Structure the discussion rather than just asking “What do you think about this proposal?” Ask, “What do you see as a strength of this proposal? What causes you concern? What did we miss?”
- Create a visual record of ideas discussed to discourage rehashing. Restate what you heard and ask for confirmation that you’ve written it correctly, or ask the person to help you “headline” the comment so you can write it on the flip chart.
- Ask the group questions that both help process the comment and allow additional input, such as:
  - “I heard Joe say xxx. What is another way to look at it?”
  - “Do others feel the same way?”
  - “Is that how you would summarize what Joe said?”
  - “What do Joe’s comments bring to mind for you?”
- Move across the room and ask for comments only from those who haven’t yet spoken.
- Ask participants to bring up only new topics that have not been covered yet in view of the time remaining.
- Instead of brainstorming as a group, ask individuals to write down their ideas, then go round-robin with each person sharing ONE idea that is different from what’s already been said.
- Incorporate small group work whenever possible. This ensures that even quiet people have a chance to discuss their ideas in a smaller, less threatening situation.
- A “ticket to talk” can be effective if the group really wants even participation.

Ticket to Talk
Good for 30 Seconds
Valid only on December 12
Participants may agree to slide the “evil star” over to people who interrupt others or start evaluating during a brainstorming session.


~ First focus all of your concentration on the speaker. While the tendency is to ignore a dominator, resist this urge and really listen fully and deeply. Leave the rest of the room totally behind. This may seem strange, but often people who talk a lot or dominate groups are so accustomed to being ignored that they repeat themselves or overemphasize their points. You want to make sure you hear exactly what they are saying.

~ Next, begin to verbally acknowledge the person. Say out loud, ‘yes’, ‘I see’, ‘right’ or other words that let the speaker know you are actively listening. By taking up a small amount of “verbal airtime” you are subtly intervening or wedging yourself into the conversation in a respectful way.

~ Lastly, verbally summarize what the other person is saying and make sure it is accurate. If the person has something else to add, he/she can do this. If he/she continues to speak about the same topic or ideas, you can ask if you have misunderstood his/her ideas.

For additional meeting tips, see the OQI web site, How to Lead Effective Meetings, at http://quality.wisc.edu/effective-meetings.htm
MANAGING A PROJECT

To understand project management, it is important to understand the two characteristics that define a project (Project Management Institute, 2000):

1. Projects have a beginning and an end. The beginning may be somewhat fuzzy as the idea evolves into a project. The end, however, should be clearly defined so that all project participants agree on what it means to be complete.

2. Projects produce a unique product. Project results can be either tangible or intangible.

Work that is unique and temporary presents different challenges than managing ongoing operations. Project management tools provide a framework for managing the communication and authority challenges that arise when working across functional or organizational boundaries. Several of these tools can be helpful to facilitators for almost any type of project.

The Appendix at the back of this Guide contains several templates to help you with managing your projects:

- Sponsor Interview Questions (Appendix F)
- Project Charter (Appendix G)
- Sample Implementation Plan (Appendix H)
- Sample Project Schedule (Appendix I)
STAKEHOLDER INPUT TOOLS

Gathering information about the needs of those who use our products and services ("customers") is often a key component of both strategic planning and process improvement efforts. Focus groups and surveys are two frequently-used means of obtaining this data.

Focus Groups

Interviewing people in groups has proven to be an effective way of gathering in-depth information about their needs. These structured group interviews are called “focus groups”. Focus groups are used increasingly in higher education as a form of institutional research to identify needs, test solutions, explore how a group perceives a problem or help in designing surveys for wider distribution.

Following are some focus group basics. For a fuller explanation of the steps in planning, leading and following up after a focus group, see OQI’s Focus Group Guide (OQI, 2007).

Definition

A focus group is a moderated discussion about specific topics on which stakeholder or customer feedback is desired. A focus group consists of six to twelve individuals who are knowledgeable about and interested in the topic being discussed. They are interviewed by a moderator to learn more about their needs.

Well-run focus groups uncover real feelings and issues and provide richer and more profound information than do personal interviews or surveys, because the dynamics of a group lead to more developed answers than any individual customer might supply on her/his own. Focus groups also provide additional non-verbal information (excitement, doubt, stress) that surveys cannot.

Focus groups are generally not appropriate tools for evaluating a program or effort. The small number of participants in a focus group is not usually a statistically defensible sample for evaluation or making projections. Focus groups are also not appropriate for "go/no go" decisions.
Focus groups are ideal, however, for identifying needs and are valuable precursors for more quantifiable market research. For example a focus group might identify issues that should be explored further through a survey of a larger, more representative sample.

Although many factors interact to create successful focus groups, several are of particular importance. We suggest a clear sense of purpose, an experienced facilitator to moderate, and follow-up after the focus group.

**Focus Group Design**

Facilitators can assist with pre-planning activities, such as designing the specific questions to be asked. This assistance early in the process can greatly increase the productivity of the focus group.

Veteran focus group moderators emphasize the importance of clearly defining the purpose of convening the focus group. Identifying in advance what kind of information is desired, from whom it should be obtained, and how it will be used determines much of the mechanics behind designing the focus group agenda and interview process, as well as the structure and content of the questions asked.

Focus groups typically follow a straight question and answer format. However, an experienced moderator may wish to use more advanced techniques such as the affinity process, importance/satisfaction diagrams, and relations diagrams (see Section 7) to elicit the best information the participants have to offer.

Regardless of the format for the interview, develop the questions that will be asked well in advance and pre-test them on a prospective focus group member so you can be assured that the participants will understand the questions.

**TIP:**

Lead with the questions which are most important to the focus group objective, in case time runs out.
**Focus Group Moderator Characteristics**

The most important factor determining focus group success is the moderator. Moderating a focus group is a skill which is partly a talent and partly developed through experience. While there are no hard rules dictated or specific educational qualifications required to succeed, some general characteristics of effective focus group moderators are listed in Figure 10.

- **Effective focus group moderators:**
  1. Are comfortable with the content of the questions asked.
  2. Skillfully probe participants’ answers and comments to identify underlying beliefs, reasoning, and experience.
  3. React in real time to the dynamics of a live group and nurture it into focusing productively on the topic of interest.
  4. Are compatible with the group to be interviewed.
  5. Are impartial and do not have a reporting relationship with those being interviewed.
  6. Are insightful and genuinely interested in hearing other people’s thoughts and feelings and can summarize and clearly articulate the ideas expressed.

*Figure 10. Characteristics of Effective Focus Group Moderators*

**Interviewing Tips**

- During a focus group, all responses, follow-up questions, and responses to the follow-up questions should be recorded. Whenever possible, non-verbal participation should be recorded as well. The moderator should not be responsible for committing everything said to paper, and those who are should remain as unobtrusive as possible.

- Remind group members that they have agreed to attend a public forum in order to provide information, and explain how the information will be used.

- “Warm up” the group. Participants will give better information when they feel like part of a friendly, problem-solving mission, in which their individual experiences and opinions are valued. There are many informal ways of doing this, as well as more formal methods such as those found in any team handbook. (See References and Additional Resources.)

- Do not let the discussion stray into areas that might highlight emotionally charged differences (income, class, race, job classification)
between focus group members. If this happens, group members may respond with emotional outbursts instead of relevant information. Lead the discussion back into a “safe” area by repeating the last question or moving on to the next.

- Seating arrangements affect the general pleasantness of focus group environments. Individual comfort is determined both by the amount of space allotted to the individual as well as the position of that space relative to others (hence, the round meeting table). Try to arrange seats so that no artificial “power” positions are created (including that of the moderator).

- Remember that focus groups are temporary associations and the moderator has little natural authority over participants. Members will usually want to participate but won’t want to have to learn complex techniques. Flexibility is the key here.

- Be wary of focus group participants silently electing a leader or spokesperson. Maintain a friendly manner, but encourage everybody to participate actively. If everyone is not involved, try using the “round robin” technique in which each member answers each question in turn before the interview continues to the next topic.

- Monitor and record non-verbal clues (eye contact, body language). They may tell you when to probe responses, when to encourage participation, or when an agenda topic has been exhausted and it is time to move on.

- If a participant is at a loss for words, or their response is vague, help them to articulate their thoughts without putting words in their mouth. You can do this by asking short, clarifying questions. If this fails, ask another member to help you understand and then check their explanation with the original respondent for accuracy.

- Keep the discussion on topic by returning to the original or follow-up question. A subtle way to do this is to ask the same question in a different way of a participant who hasn’t shared recently. Also, you must decide whether a new direction (a tangent) adds relevant information and whether there is enough time to delve into it.

- Time management is critical in order to cover the interview agenda. Set approximate discussion times for each question beforehand, but you will have to decide on the spot when to move on to new topics or extend the time on a topic that is netting good information.

- Probe responses which you feel are emotionally motivated, or which may have been given because they were socially acceptable. Behind these facades may lurk the real information you are after.
Focus Group Follow-up
Everybody who is involved with using the information learned in the focus group interview should spend time evaluating the responses. Grouping these responses into similar categories can help identify main themes, root causes, and relationships between categories.

Many times the results will not seem like an answer to the original question until the entire focus group process is documented on paper, from the original problem statement to interpretation of the results. Once the results are analyzed and summarized and the interview process has been evaluated, communicate your learning and resulting actions with other members of the sponsoring organization and with the focus group participants.

Web Survey Options
A web survey can be a cost-effective and easy-to-use means of gathering information from a broader population than is possible in a focus group. The benefits of online surveys include ease of creation and dissemination, long-term cost savings, and improved anonymity. However, careful planning and design are necessary in order to get the results needed. In addition, there are several campus policies that specifically relate to web surveys, including appropriate use and human subject testing guidelines.

There are a number of commercial online survey software tools available free or at low cost, including Zoomerang (http://info.zoomerang.com) and Survey Monkey (http://www.surveymonkey.com/). These services allow users to create and send surveys and analyze the results, but do not provide assistance with designing effective questions or deploying the survey to get the best possible response rate.

A sample process for developing and implementing a customer satisfaction survey created by the University of Wisconsin-Madison Dean of Students Office is provided in Appendix J.

On the UW-Madison campus there are good resources available to provide varying levels of assistance with different types of surveys.

WebSurvey@UW
WebSurvey@UW (http://www.doit.wisc.edu/websurvey/) is available to UW-Madison faculty and staff with an active NetID and valid requisition or
department procurement card. Several pricing options are available to fit the survey need, and a demo option allows you to experiment with the software features at no charge. WebSurvey@UW can be used to:

- Assess awareness of your project
- Evaluate a program or service
- Obtain customer/client feedback
- Test features before a product launch
- Generate data for a research project

In addition to providing survey software, the WebSurvey@UW site offers “best practices” guidelines for developing valid questions, identifying adequate sample sizes and implementing other survey best practices (see http://www.doit.wisc.edu/websurvey/practices.asp).

**University of Wisconsin Survey Center**

The UW Survey Center (http://www.uwsc.wisc.edu/) provides a full range of services for conducting high quality research surveys, from question development to data analysis. They also conduct mail, phone, CAPI surveys and focus groups. The Survey Center can assist with obtaining and managing samples, developing question wording, and designing field techniques to increase survey participation.

**University of Wisconsin LEAD Center**

Web surveys are just one method used by the Learning through Evaluation, Adaptation, and Dissemination Center (http://homepages.cae.wisc.edu/~lead) to provide high-quality formative and summative evaluation for programs in education, technology, health, and social services. The Center has worked with faculty and program administrators at UW-Madison to evaluate the impact of hundreds of educational programs. LEAD services are generally funded through grant proposals or a program’s internal funding.
DATA COLLECTION AND ANALYSIS TOOLS

An understanding of how to gather and analyze process information is basic to facilitating a process improvement project, and can also be very helpful in strategic planning and organizational re-design. The tools presented in this chapter have multiple applications, and the facilitator will benefit by having at least a general familiarity of the purpose and methods of these tools.

Data Collection Basics

Data can provide valuable information about a process. Data can be numerical values such as the number of students waiting in line or the number of errors from an invoice statement. Data are important to the improvement of a process because they represent the reality of a process as opposed to opinions or guesswork about the process.

Purpose of Collecting Data
- To understand the process, rather than relying on hunches
- To help to make educated decisions about the process based on facts
- To identify and prioritize improvement opportunities
- To analyze root causes
- To create a baseline from which you would monitor improvement in the process
- To predict future behavior, detect change in a process and to share information

Sources of Data
- People involved in the process
- Customers/stakeholders of the process
- Recorded observations of the process
- Information and knowledge management systems
**Steps for Planning Data Collection**

1. Identify what questions are to be answered or what decisions are to be made about the process
2. Define what information is needed to answer the questions or make the decisions
3. Determine where in the process you can get the data and who in the process can provide you with the data
4. Analyze existing data to determine whether they can be used to answer the questions or inform a decision
5. Identify what data analysis tools you will use and how you will display and communicate the results

**Check Sheets**

A check sheet is a simple data recording form designed to collect information efficiently and in a standard format that can be used readily and analyzed automatically. Figure 11 is an example of a check sheet designed to record errors in travel reports.

<table>
<thead>
<tr>
<th>Type of Error</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missing Information</td>
<td>43</td>
<td>36</td>
</tr>
<tr>
<td>Illegible Information</td>
<td>35</td>
<td>29</td>
</tr>
<tr>
<td>Arithmetic Error</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td>Not Signed</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Receipts missing</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Unauthorized Charge</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>120</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Figure 11. Check Sheet*
**Steps for Creating a Check Sheet**

1. Identify data to be collected. (Usually these data describe a problem in the process.)
2. Design the check sheet to maximize the collection of relevant information about the process. Investigate the who, what, where, when and how of the process. Use column and row headings.
3. Collect data.
4. Tabulate and display the results in an easy to interpret form, such as a bar graph, pie chart or Pareto chart.

**Tips for an Effective Check Sheet**

- Pre-test the check sheet with those who will be recording the data
- Make certain the data collectors understand how to use the check sheet and that they are all using it the same way
- Provide the data collectors with clear operational definitions. For example, when collecting information about incoming phone calls, be sure to define what an incoming phone call is.
- Provide separate sheets for different days and collectors.
- Include information about who is collecting the data, when it is collected, where the data are collected and for what process the data are being collected.

**Importance/Satisfaction Diagram**

A quick way to collect information about how satisfied your clients are with a list of areas of your product, service, or process, and how important each area is to them, is to ask them to complete an importance/satisfaction diagram. This tool can be used as part of a focus group or included in a written survey.

**Steps for Creating an Importance/Satisfaction Diagram**

- List the aspects of your process, product, or service which are relevant to the customer group. Five to fifteen aspects are manageable.
- Prepare a sheet listing each relevant aspect along the left margin, and two columns of 1-5 scales next to this list. The heading of the first column is “Importance” and the second column’s heading is “Satisfaction”. The top of your sheet should look something like this:

<table>
<thead>
<tr>
<th>Aspect #1</th>
<th>Importance</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
• Ask participants to fill out the questionnaire. Explain that 5 means more important/satisfied than 1.
• Collect the completed questionnaires and tabulate the total importance and satisfaction results for each aspect. For example, if there were eight completed questionnaires, the total possible satisfaction or importance score for Aspect #1 would be 40 (8 responses x 5 level of satisfaction or importance), and the lowest score would be 8 (8 responses x 1 level of satisfaction or importance).
• Create a cross-hair axis in which the horizontal axis represents importance and the vertical axis represents satisfaction. In our example with eight participants, these axes would each run from 8 to 40. Make the axes cross at their midpoints (i.e., 24). Make the chart large enough for all participants to clearly read.
• Using the total importance and satisfaction scores tabulated earlier, map each aspect on the grid with clearly identifiable but non-cluttering plotting symbols. Continuing our earlier example, if Aspect #1 has an importance score of 34 and a satisfaction score of 10, the result would be plotted as in Figure 12. Plot the scores for the remaining aspects.

![Figure 12. Importance/Satisfaction Diagram](image)

**Analyzing Importance/Satisfaction Diagram Results**
In the above example, customers are unsatisfied with Aspect #1 of the process or service in question, and they also rate it as very important. This indicates a potential area on which to focus improvement. This is an area you may want to ask customers to explain and define in more detail.
A complete diagram showing how customers evaluated 12 aspects of a product or service is shown in Figure 13. In a focus group setting, the facilitator has the opportunity to immediately follow up with participants about the aspects they indicate are most important. Why are they satisfied with some (Group I in Figure 13)? Why are they dissatisfied with others (Group II)?

Whenever possible, plot the individual participant responses for each question. This requires constructing one cross-hair for each aspect being evaluated. The benefit of this extra effort is that you may discover variation in the way different customers rank the same aspect of your product or service. Compiled or averaged responses lose this level of detail. Although this is potentially useful information, you may not be able to take the extra time during a focus group meeting.

If noticeable variation is uncovered, it should be thoroughly discussed and explained satisfactorily. Is it the variation you expected to find among eight to twelve individuals? Or do there seem to be patterns among the responses? Are there subgroups within your customer base that seem to rank certain aspects of your service in the same way?
Root Cause Analysis

In order to get at the root cause of a problem it is helpful to ask “why” at least 5 times. This allows the team to get beyond the surface symptoms to reveal the true problem. By asking, “Why did that happen?” or “Why does it work that way?” a team can determine the reason for the situation or problem, which will increase the likelihood of finding an effective solution. Figure 12 demonstrates how a “5 Whys” examination of a problem might be structured.

| Question 1: | Why was the application acceptance process delayed? |
| Answer: | Because there was missing information on the application. |
| Question 2: | Why was there missing information? |
| Answer: | Because the applicant did not provide the information. |
| Question 3: | Why did the applicant fail to provide the information? |
| Answer: | Because they never responded to our request for the information. |
| Question: | Why didn’t the applicant respond to our request? |
| Answer: | Because our request was sent E-mail, and the network was down that day. |
| Question 5: | Why was the network down? |
| Answer: | Because it was overloaded with E-mail requests, correspondence, and requests. |

Typically, “root causes” will occur in one of “4 P’s - People, Process, Policy/Procedure or Plant. The most efficient way to address a problem, then, would be to start with the “P” with the most items. There are several tools that can be used to help identify and document the factors impacting a given issue, including cause and effect diagram, interrelationship diagram, and Pareto chart.

Cause and Effect Diagram

In a cause and effect diagram (also known as the “Ishikawa” or fishbone diagram), the major cause categories or steps in the process are connected to resemble the “backbone” of the fishbone chart. Then the underlying causes (identified either through data collection or brainstorming) are placed in the appropriate category. Figure 14 illustrates the first level of information in a cause and effect diagram for
an application acceptance process. For a complete description of cause and effect diagramming, refer to *The Memory Jogger* (GOAL/QPC, 1994).

Figure 14. Cause and Effect Diagram

**Interrelationship Diagram**

When data collection efforts uncover many related issues, developing an interrelationship diagram can help identify which issues, themes, response categories, or parts of a process have the most influence, so that the root cause(s) can be isolated. The steps in creating an interrelationship diagram are as follows:

1. Write each issue on a separate card. Issues may come from affinity process headings (themes), response categories highlighted by a Pareto Chart, brainstormed ideas, etc. The diagram works best when there are 5 to 15 issues.
2. Place the cards in a circle.
3. Starting at any card, ask if the issue influences any of the others. If it does, draw an arrow from the original card to the issue that is influenced.
4. Repeat for all cards. If any two issues both influence one another, draw an arrow representing only the stronger of the two influences.
5. For each card, count the total number of outgoing and incoming arrows.
6. Rank issues by their number of outgoing arrows, and focus on those with the greatest rank. Many outgoing arrows indicate a root cause, sometimes called a “driver”. Improving those issues will “drive” the most improvement overall.

Figure 15 represents a process with eight major elements that need to be improved. To identify those which may be causing problems in other
elements of the process (the “few” problems that cause the “many” process faults), examine the relations between the themes, as shown.

Figure 15. Interrelationship Diagram

After discussing and identifying the relationships (represented by the arrows) between issues, you would arrive at the following conclusions:

- Themes 1 and 2 are potential root causes of many problems in your process, and a likely next step would be to better understand these themes and address solutions to any problems they define. Repeatedly ask yourself (5 times) why these themes may be root causes.
- Theme 5 also deserves special attention because it is influenced by the greatest number of other themes. Find out why. It may be a bottleneck in the process.

Pareto Chart

This tool is based on the Pareto principle, which states that in a given situation, a small number of causes (usually 20% of the total) account for most of the problems (usually 80% of the total). Often called the "80/20 Rule," the Pareto concept suggests that you can get the greatest results for the least amount of effort by identifying and focusing on a few key issues. It requires collecting and organizing data into root causes or categories of causes. The data is then displayed in a bar chart (see Figure 16) to give a visual representation of the relative importance of the root causes. A cumulative percentage line shows the contribution of each category to the total problem.
**SWOT Analysis**

Assessing the internal and external factors that influence and impact a unit or an organization – the “current reality” – is a vital step in both strategic planning and organizational design or redesign. This assessment is sometimes known as an *environmental scan*, but is more often referred to as a *SWOT analysis*.

A SWOT analysis involves taking an in-depth look at the strengths (S), weaknesses (W), opportunities (O) and threats (T) faced by the organization. Some people prefer to substitute the word “obstacles” for threats as it has a less negative connotation. At any rate, the objective is to look at what’s working well and what should be changed or improved.

A SWOT exercise is usually completed as a group or team function with broad input and discussion. The outcomes from it inform decisions about action planning, setting priorities, etc.

A worksheet with descriptions of SWOT questions and examples of the type of response that might be appropriate for each question is provided in *Appendix K*.

**Functional Analysis**

A function is a series of related activities performed to achieve the goals of an organization or unit. A functional analysis examines the critical activities in each of the major work areas in the organization - the core processes which the organization must perform to fulfill its mission. By
understanding the core functions, you can begin to decide how to improve an organization through redesign.

**Major Steps in a Functional Analysis**

1. List all major areas of work in the organization. This can be from an organizational chart or some other form of organizational documentation showing responsibilities and reporting relationships.
2. Brainstorm ALL of the basic duties, processes, or services provided in each major area. Don’t worry about the level of detail, just brainstorm.
3. Select the critical or core functions that are essential to delivering timely, high quality, least cost outputs (goods or services).
4. Explore how critical core functions connect or interrelate to each other. Use an interrelationship diagram to show the impacts. Is there a pattern? Does this tell you something about how functions flow through the organization?
5. Discover how and where core functions can be improved. Ask “what kinds of improvements would help make our services even better than they are today?” You can list these improvements by work area, function or for the whole organization. One very helpful way to do this is to gather a group of customers or people who work with your organization (constituents) and ask them to give you suggestions for improvements. Once this is done, you can begin redesigning your organization or improving your processes one by one.

**Core Process Roles and Responsibilities**

Defining who performs what roles in each core function can be a useful step in improving a process and/or redesigning an organization. After the major core processes are identified, all members of the organization should list the tasks/processes they manage in each area. These long lists of tasks can be sorted and categorized by a coordinating member or through a group process.

The next step is to create a matrix that lists the core processes and sub-processes and has columns for the roles. The matrix is then provided to each person who fills one or more roles in the process. A template for a Roles and Responsibilities Matrix is provided in Appendix L.
Working independently, individuals identify the processes for which they are the decision maker, process manager, back up or involved (see definitions below), putting their initials in the correct column. The individual matrices are then combined into one form by a group member or facilitator and distributed to the group.

The group should discuss the aggregate matrix and identify where there are mixed responsibilities, gaps or discrepancies. Decide as a group what needs to be changed and updated. Agree on a final version of the responsibilities matrix and share it with the rest of the organization.

The four process roles are commonly defined as follows:

▪ **Decision Maker** - Makes decisions about operating or changing the entire process; determines priorities and the scope of responsibilities for the process manager. For some processes, the process manager and decision-maker are the same.

▪ **Process Manager** - Responsible for operating or doing the task on a regular basis; answers questions about what to do regarding a specific process; makes the day-to-day decisions associated with operating the process.

▪ **Backup** - Operates the process when the process manager is away temporarily. The backup is trained and familiar with the process.

▪ **Involved** - This includes people who give input to the process, use the output, or are otherwise impacted by the process or its results.

**Additional Data Analysis Tools**

If you are involved in a project that is generating a great deal of numerical data, you may wish to familiarize yourself with additional analytical tools that are “stock in trade” for the process engineering and quality control fields. Examples of these tools are:

▪ Scatter plots (measures relationships between influences)

▪ Run chart (shows process performance trends over time)

▪ Control chart (identifies sources of process variation)

▪ Histogram (graphs the frequency distribution of large amounts of process performance data)

For detailed step-by-step instructions on using these tools, refer to *The Memory Jogger II* (Brassard & Ritter, 1994) or see www.goalqpc.com. A concise online resource for these and other tools is located at: http://www.skymark.com/resources/tools/management_tools.asp.
FACILITATOR TOOL KIT

FLOWCHARTING

In higher education, almost everything we do is part of a process. If a process is a series of steps aimed at accomplishing something, it is clear that processes abound in teaching, research and service.

Our ability to do our work depends on how well these many processes are designed and carried out. We can often function surprisingly well with clunky, inefficient processes. But what could we accomplish with processes that worked quickly, smoothly and in which errors were a rare exception? An ocean liner could sail from New York to South Hampton dragging her anchor behind. However, the trip would be a ponderous experience compared to a journey in which the anchor is properly stowed.

No one purposely designs dysfunctional processes. Over time, processes in large organizations tend to become more complex and less efficient as expedient adaptations are made without a view to the fundamental purpose or big picture. Processes degrade all by themselves if they are not tended to.

A powerful tool for improving our processes is the flowchart. An introduction to the basics of flowcharting follows. For a more detailed explanation of how to prepare a flowchart as well as sample flowcharts of campus processes, see Flowcharting Guide (OQI, 2007).

Definition

Literally a picture of the steps in a process, a flowchart represents the order and interaction of activities and decisions. The sequence, or flow, of the process is shown with arrows, while a variety of shapes or symbols can be used to depict the steps and decisions. Commonly-used flowchart symbols are shown in Figure 17.

![Figure 17. Common Flowcharting Symbols](image-url)
How Flowcharts Can Help

A flowchart provides excellent documentation of a process and can be a useful tool to analyze how various steps in a process are related to each other, revealing redundancies, delays, dead ends, and “black holes”. Flowcharting is also helpful in designing or revising a process, providing a common language for envisioning how the process could ideally function that makes it easier to discuss options from multiple perspectives.

A flowchart can be used to:
- Document an existing process
- Design an “ideal” process
- Determine whether the steps in a process are logical
- Identify bottlenecks and unnecessary complexity
- Uncover duplication of effort
- Identify opportunities to improve the process

Flowchart Types

Sequential Flowchart

The most commonly-used type of flowchart identifies steps or activities and decision points along with the important inputs and outputs of the process, and arranges them in the order in which they are completed. A sequential flowchart is particularly helpful in highlighting process complexity and identifying problem areas and opportunities for improving efficiency. Figure 18 is a simple example of a sequential flowchart.

![Sequential Flowchart Diagram](image-url)
Top-Down Flowchart
In a top-down flowchart, the major steps in a process are arranged sequentially across the top and the detailed steps are listed under each major step. Figure 19 illustrates a top-down flowchart.

![Top-down Flowchart]

Deployment Flowchart
A deployment flowchart helps identify how a process moves across people and units and also helps clarify roles, responsibilities and dependencies in the process. The deployment design shown in Figure 20 shows the key players (functional units or individuals) across the top (A-E). In the column underneath each key player are shown the steps the person/unit carries out or is responsible for.

![Deployment Flowchart]

“Hybrid” Flowchart
An alternative has emerged in practice which is a combination of the classic top-down and deployment models. This hybrid includes all the steps plus people’s names. So a “box” in this kind of flow chart might read, “Department chair forwards request…” These flow charts tend to be arrayed from the top of the page to the bottom rather than left to right.
DECISION-MAKING TOOLS

Anyone with experience working in today’s fast paced world knows how difficult it is to sort out priorities and get to a good decision. And the task of making decisions is constant in our work. How can you organize your thinking so that every such situation doesn’t require reinventing the wheel? How can you make lasting decisions? This chapter provides some techniques and tools to facilitate the decision-making process.

The Decision-Making Process

How Do You Make a “Good” Decision?

A good decision is one that gets you what/where you want…and creates a lasting solution, one that you won’t have to revisit again and again. There are some basic steps which help ensure that you have a good chance of making strong, effective, lasting decisions. The basic steps for making a good decision are illustrated in Figure 21.

Figure 21. Basic Decision-making Steps
Benefits of Using Data to Make Decisions
Using data and a structured decision-making method will keep you from:

- Retreating to old ideas because they are comfortably familiar
- Jumping to a popular decision without considering all the options
- Having too many ideas to handle
- Feeling overwhelmed by the details associated with any solution alternative
- Forcing an inappropriate decision because of time/pressures
- Having irreconcilable differences regarding solutions/choices (i.e., too many choices to choose from!)

Using data to make decisions takes a little more time, but it’s time well invested! You’ll reach consensus from those involved in the decision, increase the percentage of right decisions, and create lasting solutions to important problems and challenges.

Decision Criteria
Whenever a group must make a decision or choice, identify ahead of time the criteria you will use for the final decision(s). This holds true for a variety of decisions ranging from office space allocation to curriculum changes to selection of candidates. When the group has agreed on criteria early in the process, all possible choices can be judged against the criteria. The UW-Madison School of Human Ecology, in redesigning its governance structure, identified six criteria that the new structure was to meet. These are listed in Figure 22. All options were compared to these criteria.

Criteria Structure
- Clarity
- Efficiency
- Participation
- Deliberation
- Community
- Continuous Improvement

Figure 22. Criteria for a Successful Governance Structure in the School of Human Ecology
Criteria Matrix

A criteria matrix is just one of many tools currently considered “best practice” for good decision-making. It uses a systematic approach to narrow down options, comparing choices by using a combination of weighted voting and ranking.

A criteria matrix is especially helpful when:
- Options for a solution are many (10-20 choices)
- There are a significant number of criteria (6-15 items)
- Quick consensus is needed to proceed

Steps in Creating a Criteria Matrix

- **Step 1:** Produce a clear goal statement. This statement strongly affects which criteria are used.
  
  **Sample Goal Statement:** To choose the best computer system for our office operations.

- **Step 2:** Brainstorm, with others central to the decision, a list of criteria that a good solution must satisfy. *What features are essential for the computer system to provide?*

<table>
<thead>
<tr>
<th>Criteria:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. <em>Compatibility</em></td>
</tr>
<tr>
<td>B. <em>Cost</em></td>
</tr>
<tr>
<td>C.</td>
</tr>
<tr>
<td>D.</td>
</tr>
</tbody>
</table>

- **Step 3:** Be clear and concise on the meanings of the criteria.

<table>
<thead>
<tr>
<th>Definitions of Each Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criteria</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>A: <em>Compatibility</em></td>
</tr>
<tr>
<td>B: <em>Cost</em></td>
</tr>
<tr>
<td>C:</td>
</tr>
<tr>
<td>D:</td>
</tr>
</tbody>
</table>

TIP: Before using the criteria matrix it’s wise to be sure you are addressing the real problems and not symptoms that indicate deeper issues.
- **Step 4:** Create an L-shaped matrix with the criteria across the top (A-D) and solution options down the side (1-3). *Which company’s computer system satisfies which requirements?*

<table>
<thead>
<tr>
<th>Options</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>D</td>
</tr>
<tr>
<td><strong>Computer 1 - PC</strong></td>
<td>Compatibility</td>
</tr>
<tr>
<td><strong>Computer 2 - Mac</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Computer 3 – Sony Laptop</strong></td>
<td></td>
</tr>
</tbody>
</table>

- **Step 5:** Assign a weight to each criteria based on importance.

<table>
<thead>
<tr>
<th>Criteria</th>
<th><em>Weight 0-5 (5 being high)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>A: Runs key office software application</td>
<td>4</td>
</tr>
<tr>
<td>B: Total 5-year cost of ownership</td>
<td>4</td>
</tr>
<tr>
<td>C:</td>
<td></td>
</tr>
<tr>
<td>D:</td>
<td></td>
</tr>
</tbody>
</table>

* Weight is NOT a ranking. Consider each criterion on its own merits.

- **Step 6:** Total the weight for each option (*computer system*). For each potential solution, check which criteria the option meets, if any. You may jot down a word or two to remind you which is your first criterion, etc. Total the weight for each solution option.

<table>
<thead>
<tr>
<th>Criteria/Weight (from Step 5)</th>
<th>Computer 1 PC</th>
<th>Computer 2 Mac</th>
<th>Computer 3 Sony Laptop</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Criterion A: Compatibility</strong></td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Weight: 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Criterion B: Cost</strong></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Weight: 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Criterion C</strong></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Weight: 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Criterion D</strong></td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Weight: 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Weight</strong></td>
<td>*8</td>
<td>7</td>
<td>5</td>
</tr>
</tbody>
</table>

*Probably your best bet*

- **Step 7:** List the weighted solution options in priority order.
**Force Field Analysis**

A graphical representation of the factors supporting a decision versus those blocking the decision, this tool was developed by Kurt Lewin, a social psychologist working at MIT in the 1940’s. It provides a way to identify positive aspects of a solution that can be reinforced and/or barriers between one’s current status and the desired change that must be lowered or eliminated in order to effect change. This tool can also be used to assess whether there is enough support for a decision to move forward with implementation. Figure 23 shows how to set up a force field analysis chart.

![Figure 23. Force Field Analysis](image)

After brainstorming the factors that are driving you towards the change and those that are restraining movement toward the desired state, prioritize both lists to determine where you can leverage positives and where it might be more helpful to remove barriers.

**Dot Voting**

Dot voting is a very simple and quick method for groups to use in setting priorities when there are many options. It can be used to identify where to start in addressing an issue, which project to start first, what is our top core value, etc.

For example, suppose a group has generated a list of all the things they believe they should address this school year. They know they can’t do it all. This method would help give a sense (albeit unscientific) of which items are most important and should be addressed first.

**Steps in the Dot Voting Method**

1. Begin by brainstorming all the options and list on a flipchart in any order. Leave enough space between the items to place sticky dots.
2. Give each person in the group 10 dots (for this exercise, color is irrelevant). Instruct them that to indicate their priorities, they are...
to “use all 10 dots but no more than 4 on any ONE item.” Therefore, 4 dots would indicate their top priority. Some items will have no dots.

3. Participants walk up to the flipcharts and place their dots under the items. If you have a larger group, split the items on 2 flipcharts on opposite sides of the room so as not to take too much time or cause congestion. Start half the group on each chart.

4. When everyone has placed his/her dots, count the number of dots for each item and make a priority listing on a new flipchart page. There usually are a few clear winners. You may then discuss with the group if they agree those should be top priorities on which to start working. It does not mean the others are eliminated.

This exercise creates a “fun” activity, good visual, and limits discussion if it has gone on too long, as well as getting input from the entire group.

“Zero to Ten” Rating Method

Suppose you have used an affinity or brainstorm exercise to get at the top concerns of an organization or all the items a group wants to work on or include in a document, a code of conduct, or ground rules. This method is a very simple and yet visual way to give the group feedback on how they as a group rate their performance on these items.

Imagine a group setting a “Code of Conduct” for their work together. Follow these steps.

1. Discuss with the group all the items they want included in the topic and perhaps use the dot voting method to prioritize the most important items. List each item in the code of conduct on a flip chart with a scale underneath each item as shown below.

   ( 0 __________ X __________ 10 )

2. Explain that the scale means that zero is the lowest (we are doing awful as a team on this item, e.g. “treating each other with respect”). A ten would mean “We could not be better!”

3. Have each person come up to the flip chart and place a dot on the scale where he or she feels the group rates on each item. (Tip: If there are trust or confidentiality issues, turn the flip chart around and have each person go up individually to place their dots. Sometimes the facilitator even puts his/her mark there first so that no one knows where the first person placed it. This is helpful in extreme cases of distrust or uneasiness with disclosing opinions to the group).
4. The result is a good visual of where there are clusters of agreement. It gives the group a quick way to say, “Let’s not spend time on all the items that are rated 8-10 (where we’re doing really well), but let’s put our energies where we all agree we need help (the zero to 4 group).”

5. OR, the results may show a group that they are “all over the board.” This is a very good discussion point, particularly if you tend to have some vocal folks who say, “The whole group thinks this...” or “I’m sure we all agree...” etc.

A typical next step after the zero to ten rating exercise would be to assign small groups to address the top items and determine how they should approach the issue, get the project done, resolve the concern, or whatever. Get real action teams started!

**Impact/Effort Matrix**

This is another tool that can be used to help a group decide where to focus efforts when there are many possible actions that can be taken.

Start by creating a numbered list of all the potential actions. Then, taking one action at a time, ask the group to quickly indicate how much effort they think it will take to accomplish that action and how much impact it will have on the overall goal. Write the action number in the location on the matrix that represents the intersection of the effort and the impact for that item. Clusters of items that end up in the “A” quadrant are those that will make the most difference for the least amount of effort, as shown in Figure 24.

![Figure 24. Impact/Effort Matrix](image-url)
MEASURING IMPACT

Most administrative units and academic departments have goals of some kind. Often missing in these goals is a way to measure the impact of achieving them – the “measures of success”. What will tell us that we accomplished these goals and that it made any difference? Measures of success are the criteria that we believe show the impact of our work. The measures may be either quantifiable or qualitative, but they must be observable in some way.

Ideally all processes in the university should have stated goals and identified measures. (Note that a process is a series of actions aimed at producing something—information, a service, a decision, a product. It is not difficult to see that the work of the university depends on many processes.) These measures should reflect the purpose, mission, and hopes of the responsible unit as well as of the campus as a whole.

Without data to compare what our deliberate actions have accomplished to the performance of the prior state, we have little or no foundation for decision-making or improvement. Without data, anyone’s opinion is as good as anyone else’s. “Common knowledge” is notoriously unreliable for decision-making!

Measures should tell us whether changes to our processes:

- Achieved the results we expected
- Produced results we didn’t want or expect
- Should be further improved
- Should continue (or not)
- Should be measured in other ways

There are many possible measures for various campus processes and functions. For example, an administrative unit may identify reduced errors as a measure of success. An academic department may have high student retention or satisfactory progress toward degree as a measure of success for graduate students.
These need not be complicated systems. One university office’s goal was to produce a publication that reached people’s desks on or before the first day of the month. To track this, one person in the office merely wrote the date at the top of the newsletter the day it was received. Measuring the success of the publication arriving “on-time” was merely a matter of scanning back issues for any “late” arrivals.

**Functions of Impact Measures**

Establishing measures to evaluate impact is hypothesis testing. We think that if we do A, then B will happen. We assume there is a cause-and-effect relationship. Establishing measures and then comparing what actually happened to what you thought would happen is a reality check on your hypothesis. The resulting data can beg the question, “If this process isn’t working like we thought it would, how should we change it, or should we even continue the process?”

Measures provide feedback for what *Balanced Scorecard* authors, Kaplan and Norton (1996) call “double-loop learning”. They say that double-loop learning occurs when managers question their own assumptions and reflect on whether their underlying theory is consistent with current evidence and observations. They say that managers first need single-loop learning—feedback about whether the plan is being implemented as originally conceived. “But even more important, they need feedback about whether the planned strategy remains viable. This is double-loop learning. Managers need information so they can question whether the fundamental assumptions made when they launched the strategy are valid” (p. 17).

Measures create a common language. The very act of identifying the measures and then collecting the data creates a set of shared expectations within a working group. When committees, groups, or teams begin talking about impact and success in concrete, measurable terms, it very quickly becomes apparent whether or not people are thinking in the same terms.

**Why Measurement Systems Fail**

Figure 25 includes a list of possible reasons why measurement systems fail. These suggest that, among other things, the people who are key players in the process as well as those who use the process should be involved in (or at least seriously consulted) in developing appropriate measures for the process.
Another reason measurement systems fail is that measurement is not designed into the process. Measuring impact is thought of after the fact and as an add-on to the process. This view and practice makes measurement onerous and often not sufficiently timely to be useful. Instead, build feedback and measurement into the process and ensure that individuals are responsible, as part of their job descriptions, for collecting data on results and sharing it with the appropriate players.

A measurement system may fail for one of several reasons. It may fail because we:

1. Impose management measures on the performing group instead of allowing the group to establish the measures
2. Do not involve process owners and those who know the most about the process in developing the measurement systems
3. Treat measurement information and trends as private data and do not share the information with the group
4. Fail to recognize and reward performance improvement
5. Fear exposing good or bad performance. The group may be satisfied with the status quo and not want to upset anyone [although good measurement systems measure processes and organizations, not individuals]
6. Improperly define the system or process to be measured
7. Spend too much time on data gathering and reporting and not enough time on analysis and action
8. Fail to consider customer requirements

From: Malcolm Baldrige National Quality Award Office

Figure 25. Why Measurement Systems Fail

Limitations of Measurement Systems

W. Edwards Deming (1982) called reliance on measurable figures alone, without consideration of factors that are unknown or unknowable, one of the seven big “deadly diseases” of an organization. University educators are particularly sensitive to the limitations of data. Not only because of Deming’s warning that not everything that is significant can be measured, but also because of concern about the effects of intervening or confounding variables.
To mitigate these limitations of data, use a mix of measures. Include measures that are both:

- Short-term and long term
- Focused on impacts as well as on the processes that presumably created the impacts
- Objective as well as softer and more subjective

Zigon (1995) suggests aiming for measures of impact that are verifiable. Following Deming’s thinking that some work cannot be meaningfully measured with numbers, he says that descriptive or qualitative measures can be just as useful as numbers if there is a judge, factors the judge looks for, and a verifiable description of what represents meeting expectations. For example, impact measures for building community among students in a graduate program may rely more on descriptions of desired changes in behavior than on numbers.

In summary, it is probably safe to say that a single numerical measure is not adequate for making a “high stakes” decision about a program, service, or process. The numbers, however, may reveal trends that prompt further investigation.

**Metrics on Campus**

In the Appendices of this document you will find a list of sample institutional measures and a sample classification system, plus examples of goals and measures of success from various UW-Madison plans.

In the environment of limited resources in which many campus units find themselves, finding time to create and monitor a measurement system can be a very real issue. Some ways to deal with this issue of time include:

- Select measures that reflect the vision and strategic priorities of the unit
- Automate data collection, analysis and reporting as much as possible
- Include data collection tasks in job descriptions
- Use sampling techniques instead of trying to monitor and analyze every instance
- Involve graduate students with related research interests
- Use the information provided by the measurement system to make decisions about where, and to what extent, resources are allocated
Tools for Developing Measures

You can have fuzzy cheeks, peaches, toys, slippers and sometimes logic. But when your goals are fuzzy, it’s hard to make them happen. And you can forget trying to measure their success! One way to be sure your goals are actionable is to include a verb or action word in each one. Figure 26 is a list of verbs that can be helpful in defining goals.

<table>
<thead>
<tr>
<th>All-Purpose</th>
<th>Investigative (checking it out)</th>
<th>Consultative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adapt</td>
<td>Execute</td>
<td>Analyze</td>
</tr>
<tr>
<td>Use</td>
<td>Utilize</td>
<td>Advise</td>
</tr>
<tr>
<td>Lead</td>
<td>Simplify</td>
<td>Inform</td>
</tr>
<tr>
<td>Supervise</td>
<td>Gather</td>
<td>Negotiate</td>
</tr>
<tr>
<td>Collect</td>
<td>Select</td>
<td>Coach</td>
</tr>
<tr>
<td>Complete</td>
<td>Compare</td>
<td>Guide</td>
</tr>
<tr>
<td>Help</td>
<td>Expand</td>
<td>Resolve</td>
</tr>
<tr>
<td>Serve</td>
<td>Decide</td>
<td>Counsel</td>
</tr>
<tr>
<td>Perform</td>
<td>Recommend</td>
<td>Mentor</td>
</tr>
<tr>
<td>Initiate</td>
<td>Increase</td>
<td>Suggest</td>
</tr>
<tr>
<td>Communicate</td>
<td>Decrease</td>
<td>Demonstrate</td>
</tr>
<tr>
<td>Streamline</td>
<td>Revise</td>
<td>Model</td>
</tr>
<tr>
<td>Publish</td>
<td>Discontinue</td>
<td>Teach</td>
</tr>
<tr>
<td>Disseminate</td>
<td>Reduce</td>
<td>Benchmark</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Generative (making things happen)</th>
<th>Coordinative</th>
<th>Collaborative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop</td>
<td>Establish</td>
<td>Accommodate</td>
</tr>
<tr>
<td>Modify</td>
<td>Inaugurate</td>
<td>Facilitate</td>
</tr>
<tr>
<td>Restructure</td>
<td>Make</td>
<td>Persuade</td>
</tr>
<tr>
<td>Construct</td>
<td>Propose</td>
<td>Support</td>
</tr>
<tr>
<td>Devise</td>
<td>Simplify</td>
<td>Assist</td>
</tr>
<tr>
<td>Design</td>
<td>Redesign</td>
<td>Guide</td>
</tr>
<tr>
<td>Innovate</td>
<td>Re-engineer</td>
<td>Resolve</td>
</tr>
<tr>
<td>Organize</td>
<td></td>
<td>Unite</td>
</tr>
<tr>
<td>Revise</td>
<td></td>
<td>Contribute</td>
</tr>
<tr>
<td>Create</td>
<td></td>
<td>Help</td>
</tr>
<tr>
<td>Form</td>
<td></td>
<td>Share</td>
</tr>
<tr>
<td>Invent</td>
<td></td>
<td>Encourage</td>
</tr>
<tr>
<td>Produce</td>
<td></td>
<td>Offer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Steer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Synthesize</td>
</tr>
</tbody>
</table>

*Figure 26. Sample Verbs for Goals*
The following worksheets for developing measures are included in the Appendices:

- Goal development worksheet
- Action plan
- Measure identification questionnaire
Appendix A: BrainWriting 6-3-5 Worksheet

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Appendix B: Meeting Agenda Template

<table>
<thead>
<tr>
<th>Staff Meeting</th>
</tr>
</thead>
</table>

**Date:** _______________________

**Start/End Time:** _______________________

**Location:** _______________________

**Purpose of Meeting:** *Explains why the meeting is being held and what will be accomplished.*

**Note Taker:** *Documents the key points raised and decisions made and circulates written minutes to participants immediately following the meeting.*

**Time Keeper:** *Informs the group when an agenda item is taking longer than planned so that the group can determine whether to adjust the agenda or move to the next item.*

**Attendees:** *Actively participate in the meeting, perform assigned tasks outside of meetings in the time frame assigned, read background materials, and otherwise prepare in advance to contribute to a productive meeting.*

**Unable to Attend:** *Send input on discussion items to the group leader in advance of the meeting, perform assigned tasks outside of meetings in the time frame assigned, and get updated on the meeting’s outcomes.*

<table>
<thead>
<tr>
<th>----- AGENDA ---</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AGENDA ITEM</strong></td>
</tr>
<tr>
<td>Describe agenda items in action terms (e.g., Review plans for XYZ) that focus the group’s work toward achieving desired outcomes. Assign a time limit and someone to lead discussion of each item.</td>
</tr>
</tbody>
</table>

**ACTION ITEMS:**

<table>
<thead>
<tr>
<th>PERSON RESPONSIBLE</th>
<th>DEADLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Record who is responsible for what follow-up action and by when.</td>
<td></td>
</tr>
</tbody>
</table>

**NEXT MEETING WILL BE:**

*Set the next meeting while everyone is in the room and can check their calendars, rather than relying on someone making multiple contacts to firm up a date.*
# Appendix C: Meeting Minutes Template

**Meeting Title**

**Minutes**  
[Meeting Date]  [Meeting Time]  [Meeting Location]

<table>
<thead>
<tr>
<th>MEETING CALLED BY</th>
<th>TYPE OF MEETING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FACILITATOR</th>
<th>NOTE TAKER</th>
<th>TIMEKEEPER</th>
<th>ATTENDEES</th>
<th>GUESTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Agenda Topics

<table>
<thead>
<tr>
<th>[Time allotted]</th>
<th>[Agenda topic]</th>
<th>[Presenter]</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Time allotted]</td>
<td>[Agenda topic]</td>
<td>[Presenter]</td>
</tr>
</tbody>
</table>

**DISCUSSION**

[Key points, decisions, motions & voting results, actions & due dates]

**CONCLUSIONS**

**ACTION ITEMS**

<table>
<thead>
<tr>
<th>PERSON RESPONSIBLE</th>
<th>DEADLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SPECIAL NOTES**


### Appendix D: Meeting Planner Checklist

<table>
<thead>
<tr>
<th>Activity</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select meeting date and time, and check for potential conflicts</td>
<td></td>
</tr>
<tr>
<td>Reserve meeting room (consider disability access needs)</td>
<td></td>
</tr>
<tr>
<td>Develop list of participants</td>
<td></td>
</tr>
<tr>
<td>Notify or send an electronic meeting request to all participants</td>
<td></td>
</tr>
<tr>
<td>Reserve type and quantity of equipment needed</td>
<td></td>
</tr>
<tr>
<td>- Microphone/sound system</td>
<td></td>
</tr>
<tr>
<td>- Projection equipment - overhead or LCD</td>
<td></td>
</tr>
<tr>
<td>- Laptops</td>
<td></td>
</tr>
<tr>
<td>- Flip charts &amp; easels</td>
<td></td>
</tr>
<tr>
<td>- &quot;Sticky wall&quot;</td>
<td></td>
</tr>
<tr>
<td>Arrange for a note taker; schedule time in note taker’s calendar to produce a summary of the meeting immediately following</td>
<td></td>
</tr>
<tr>
<td>Design meeting evaluation form</td>
<td></td>
</tr>
<tr>
<td>Determine handouts/information to route prior to the meeting</td>
<td></td>
</tr>
<tr>
<td>Arrange for food or beverages, as needed</td>
<td></td>
</tr>
<tr>
<td>Preview meeting room, check for:</td>
<td></td>
</tr>
<tr>
<td>- Seating capacity</td>
<td></td>
</tr>
<tr>
<td>- Room set up (see Appendix E)</td>
<td></td>
</tr>
<tr>
<td>- Wall space for hanging charts</td>
<td></td>
</tr>
<tr>
<td>- Projection screen</td>
<td></td>
</tr>
<tr>
<td>- Projector &amp; laptop connections and internet connection</td>
<td></td>
</tr>
<tr>
<td>- Flip chart easels and extra pads</td>
<td></td>
</tr>
<tr>
<td>- White/black boards</td>
<td></td>
</tr>
<tr>
<td>Make arrangements for parking</td>
<td></td>
</tr>
<tr>
<td>Copy handouts &amp; assemble meeting materials packets</td>
<td></td>
</tr>
<tr>
<td>Send meeting reminder notice (include directions to meeting location)</td>
<td></td>
</tr>
<tr>
<td>Send pre-meeting homework assignment, if appropriate</td>
<td></td>
</tr>
<tr>
<td>Prepare name badges or table tents</td>
<td></td>
</tr>
<tr>
<td>Assemble facilitation supplies (markers, self-stick notes, large cards, markers, colored dots, digital camera, masking tape, sticky wall, etc.)</td>
<td></td>
</tr>
<tr>
<td>Obtain room key or arrange for room to be unlocked</td>
<td></td>
</tr>
<tr>
<td>Set up meeting room and test projection equipment</td>
<td></td>
</tr>
<tr>
<td>Introduce speaker/facilitator</td>
<td></td>
</tr>
<tr>
<td>Distribute and collect evaluation forms</td>
<td></td>
</tr>
<tr>
<td>Type and distribute meeting notes</td>
<td></td>
</tr>
<tr>
<td>Review evaluations</td>
<td></td>
</tr>
<tr>
<td>Schedule follow-up “check” meeting with group</td>
<td></td>
</tr>
</tbody>
</table>
Appendix E: Room Set-up Options

1. Classroom (standard)

2. U-Shape (smaller group)

3. Herringbone (large group)

4. Herringbone (small group)

5. Herringbone (group participation and discussion)

6. Rounds (small groups)
Appendix F: Sponsor Interview Questions

1. Briefly describe the process you wish to improve (scope of the project and why you want to improve it).
   - What tells you the process needs improving (impacts, data, problems, concerns)?
   - Who would benefit? How would you know?
   - What measures would tell you the process has improved?

2. What are your goals or objectives for this process?
   - Does this group know or share this aim?

3. What do you hope to have accomplished by the end of the project?
   - Products
   - Outcomes
   - Measures

4. Is there any existing data that would help the project move along?

5. Is there anything that I should know about the team/group that might affect our success?
   - Who is involved?
   - Have they met as a group before?
   - Have they ever had a facilitator before? How do they feel about it?
   - How do they function together as a team?

6. What are your expectations of me as the facilitator? Do you have any expectations of me beyond this process?

7. Do you have any parameters/ground rules of which I should be aware?

8. Discuss and fill out the Project Charter (see Appendix G)

9. Should I talk to anyone else from the team/group before the meeting?

10. Who will be responsible for documenting meeting decisions and results? (Make sure this information can get out within a day of the meetings.)
Appendix G: Project Charter Template

Project Title:

Creation Date / Version:

Project Description: (What are we trying to accomplish):

Business Justification: (Why is this important?):

Project Boundaries (Scope / Limitations / Assumptions, How far can we go):

Measurable Results (How will we know):

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Timeline / Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Team</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Project Manager</td>
</tr>
<tr>
<td></td>
<td>Project Resource</td>
</tr>
<tr>
<td></td>
<td>Project Resource</td>
</tr>
<tr>
<td></td>
<td>Project Resource</td>
</tr>
<tr>
<td></td>
<td>Project Resource</td>
</tr>
<tr>
<td></td>
<td>Consultant-Project Facilitator</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Budget</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>$</td>
</tr>
<tr>
<td>Development</td>
<td>$</td>
</tr>
<tr>
<td>Implementation</td>
<td>$</td>
</tr>
</tbody>
</table>

Project Approval:

<table>
<thead>
<tr>
<th>Name / Title</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix H: Implementation Plan Template

*Insert Project Name Here*

<table>
<thead>
<tr>
<th>Process:</th>
<th>Point Person:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>#</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PHASE 1: PROJECT PLANNING & MONITORING** *(on-going project management)*

1.1 Review project assumptions and parameters
   - Goals and objectives
   - Critical success factors for the implementation
   - Process stakeholders

1.2 Define implementation team structure
   - Identify team members
   - Assign roles and responsibilities
   - Develop detailed work plan, including schedule and resources

1.3 Determine impact of changes on interrelated processes

1.4 Develop project tracking & change management tools

1.5 Hold implementation team kick-off meeting

1.6 Monitor project progress and resource issues

**PHASE 2: TRAINING** *(training may be needed for the implementation team and also for those involved in the changed process)*

2.1 *Insert tasks*

2.2 *

**PHASE 3: [Insert Phase Name]**

3.1 *Insert tasks*

3.2 *

**PHASE 4: [Insert Phase Name]**

4.1 *Insert tasks*

4.2 *

**PHASE . . .

...1 *Insert tasks*

...2 *Insert tasks*
## Appendix I: Sample Project Schedule

<table>
<thead>
<tr>
<th>Task Name</th>
<th>Start</th>
<th>Finish</th>
<th>Status/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Assessment</td>
<td>12/14/2006</td>
<td>4/13/2007</td>
<td>Summary Created</td>
</tr>
<tr>
<td>Functional Analysis &amp; Staff Feedback</td>
<td>12/14/2006</td>
<td>5/14/2008</td>
<td>Diagram Created</td>
</tr>
<tr>
<td>Initiate Project: Approve Charter</td>
<td>11/14/2006</td>
<td>12/1/2006</td>
<td>Verify charter is approved</td>
</tr>
<tr>
<td>Project Planning Team Selected</td>
<td>12/22/2006</td>
<td>12/22/2006</td>
<td></td>
</tr>
<tr>
<td>Project Planning Team Meeting #1</td>
<td>12/14/2006</td>
<td>12/14/2006</td>
<td>Need to create meeting agenda</td>
</tr>
<tr>
<td>Draft project plan, schedule team meetings, communications plan, prepare for kick-off meeting</td>
<td>12/14/2006</td>
<td>12/14/2006</td>
<td></td>
</tr>
<tr>
<td>Customer Survey</td>
<td>12/14/2006</td>
<td>3/14/2007</td>
<td>Questions Created, working with Survey Center</td>
</tr>
<tr>
<td>Create questions</td>
<td>12/14/2006</td>
<td>2/13/2007</td>
<td></td>
</tr>
<tr>
<td>Send out questions to customers</td>
<td>2/5/2007</td>
<td>2/5/2007</td>
<td></td>
</tr>
<tr>
<td>Results from survey produced</td>
<td>3/14/2007</td>
<td>3/14/2007</td>
<td></td>
</tr>
<tr>
<td>All Staff Project Kick-off Meeting</td>
<td>1/9/2007</td>
<td>1/9/2007</td>
<td>Need to create meeting agenda</td>
</tr>
<tr>
<td>Analysis of functional data</td>
<td>1/16/2007</td>
<td>1/31/2007</td>
<td></td>
</tr>
<tr>
<td>Analysis of customer data</td>
<td>1/16/2006</td>
<td>1/31/2007</td>
<td></td>
</tr>
<tr>
<td>Create process map and design</td>
<td>2/1/2007</td>
<td>2/28/2007</td>
<td></td>
</tr>
<tr>
<td>Task 14</td>
<td>12/14/2006</td>
<td>12/14/2006</td>
<td></td>
</tr>
</tbody>
</table>
Appendix J: Customer Survey Process

DEVELOPING AND IMPLEMENTING A CUSTOMER SATISFACTION SURVEY
Purpose: To gather customer satisfaction data to guide improvement activities

0 Start Up
- Form Team
- Set team goals and objectives
- Define and assign team member roles
- Orient team members to the organization
- Locate funding

1 Identify and Prioritize Customers
- Brainstorm a list of customers
- Helpful questions: What does the organization do? What is their mission? Who do they exist to serve? Who is impacted by the service?
- Determine primary customers
- Determine secondary customers and stakeholders
- Determine internal and external customers
- Verify the prioritized list with Director/Manager/Coordinator who is ultimately responsible for the office

2 Gather Info on Customer/Survey Needs
- Review existing customer data
- Interview some customers directly using open-ended questions
- Determine goals and objectives of the survey
- Determine customers who will use the survey results

3 Carry Out Data Collection
- Review previous surveys
- Produce first survey draft
- Consult with survey experts
- Revise survey based on expert advice
- Administer pilot or focus groups as appropriate
- Adjust survey based on pilot
- Adjust survey based on additional expert advice, as appropriate
- Request student sample from Registrar's Office
- Have Survey Research Lab randomize the sample
- Label and number the surveys
- Establish process for carrying out the survey
- Hire and train the survey callers
- Administer the process via phone
- Consult with experts on an ongoing basis

4 Structure the Needs/Results of the Survey
- Compile the survey data
- Enter survey data into statistical program
- Analyze the results
- Produce a report
- Convert customer likes and dislikes into needed improvements in the organization

5 Assess Importance of the Improvements to Customers/Improve the Organization
- Determine needed improvements
- Prioritize needed improvements
- Verify priorities with customers
- Develop a plan for carrying out improvements
- Carry out the improvements

6 Study the Survey Process and Take Action to Improve it
- Document what went well in the process
- Document what area could be improved
- Helpful questions: What have we learned? Did this process meet the goals and objectives of the survey project?
- Use this information to improve the process for next time

Return to Start-Up
- Repeat the survey process
- Study the longitudinal changes over time
- Identify new areas for continuous improvement

UW-Madison Dean of Students Office Quality Assessment Team
### Appendix K: SWOT Analysis Template

#### S.W.O.T. - Assessing Our Current Situation

<table>
<thead>
<tr>
<th>Internal Strengths</th>
<th>Internal Weaknesses</th>
<th>External Opportunities</th>
<th>External Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>What skills, services, and resources distinguish us?</em></td>
<td><em>What do our customers think we could do better? Where could we be more efficient?</em></td>
<td><em>What influences, partnerships, and resources could be tapped to help us move forward?</em></td>
<td><em>What forces, trends, technology changes, governmental policy, social patterns or campus issues could limit our ability to meet our goals?</em></td>
</tr>
</tbody>
</table>

- Adaptability
- Staff willingness to take on new stuff
- Customer service focus

- Aging technology systems
- Complicated processes
- Web site maintenance

- Globalization increases the market for our services
- A cultural shift is increasing the perceived value of education
- Untapped grant funding

- Globalization increases our competition
- State budget cuts
- Negative press
# Appendix L: Sample Roles & Responsibility Matrix

*Directions: For the key processes listed below, please add the initials of the people you feel are the process decision-makers, managers, back-ups and those involved.*

<table>
<thead>
<tr>
<th>Process Decision-Maker: Makes decisions about operating or changing the entire process; determines priorities and scope of responsibilities for process manager.</th>
<th>Process Manager: Responsible for operating or doing the task(s) on a regular basis; answers questions about what do to regarding a specific process or task.</th>
<th>Back-Up: Operates the process when the process manager is away temporarily. The backup is trained in and familiar with the process.</th>
<th>Involved: This includes people who give input to the process, use the output, or are otherwise impacted by the process and its results. These are people who should be involved in some way when the process is changed.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Process</strong></td>
<td><strong>Decision Maker</strong></td>
<td><strong>Process Manager</strong></td>
<td><strong>Backup</strong></td>
</tr>
<tr>
<td>1. Newsletter</td>
<td>DR</td>
<td>DA</td>
<td>---</td>
</tr>
<tr>
<td>3. Web site</td>
<td>JE</td>
<td>LT</td>
<td></td>
</tr>
<tr>
<td>4. Payroll/time sheets</td>
<td>DR</td>
<td>DA</td>
<td>KP</td>
</tr>
<tr>
<td>5. Office nuts &amp; bolts (e.g., feed fish, etc.)</td>
<td>DR</td>
<td>DA</td>
<td>KP</td>
</tr>
<tr>
<td>6. Reception and telephone</td>
<td>IS</td>
<td>DA</td>
<td>ZO</td>
</tr>
<tr>
<td>7. Research proposal submissions</td>
<td>DA</td>
<td>RN</td>
<td></td>
</tr>
<tr>
<td>8. Departmental files</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Timetable</td>
<td>AW</td>
<td>DR</td>
<td></td>
</tr>
<tr>
<td>11. Course logistics/admin tasks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Recruitment of students to help on projects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Research &amp; project reports</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Annual report</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Financial administration of grants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Paying Center bills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Project coordination (who’s doing what, billing)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Monthly reports</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Office maintenance (trash, coffee, repairs)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Electronic equipment purchase/repair</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. Printing/copying</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. Mail/UPS/Fed Ex (sending, accepting, routing)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. Staff evaluations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. Vacations/leaves</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. Office supplies/furnishings purchases</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: For some processes, the process manager and decision-maker are the same person.*
## Appendix M: Sample Institutional Measures of Success

The following measures of institutional success are from Dolence, Rowley, and Lujan (1997). The term they use is “key performance indicators” or KPIs.

<table>
<thead>
<tr>
<th>Key Performance Indicator (KPI)</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate FTE enrollment</td>
<td>Number of total units attempted divided by 15</td>
</tr>
<tr>
<td>Graduate FTE enrollment</td>
<td>Number of total units attempted divided by 12</td>
</tr>
<tr>
<td>Tuition revenue</td>
<td>Tuition revenue collected net of institutional financial aid</td>
</tr>
<tr>
<td>Graduation rate</td>
<td>Percentage of full-time undergraduates who graduate in 4 [or x] years</td>
</tr>
<tr>
<td>Minority enrollment</td>
<td>Percentage of all enrolled students who are minorities</td>
</tr>
<tr>
<td>Placement rate</td>
<td>Percentage of graduates employed or in advanced study one year after graduation</td>
</tr>
<tr>
<td>Student-faculty ratio</td>
<td>Number of FTE students divided by number of FTE faculty</td>
</tr>
<tr>
<td>Recruitment yield</td>
<td>Percentage of students offered admission who enroll</td>
</tr>
<tr>
<td>Retention rate</td>
<td>Percentage of students who maintain satisfactory progress</td>
</tr>
<tr>
<td>Break-even major index</td>
<td>Total revenue deriving from students in each major minus the attributable cost of the major department</td>
</tr>
<tr>
<td>Average debt burden</td>
<td>Total value of loans divided by the number of loan recipients</td>
</tr>
<tr>
<td>Student satisfaction</td>
<td>Composite a score from annual students needs and priorities survey</td>
</tr>
<tr>
<td>Average SAT score</td>
<td>Average SAT score of incoming freshmen</td>
</tr>
<tr>
<td>Value of endowment</td>
<td>Book value of endowment at the end of each quarter</td>
</tr>
<tr>
<td>Deferred maintenance</td>
<td>Dollar value of maintenance backlog</td>
</tr>
</tbody>
</table>

Appendix N: Sample Student Retention Classification System

The following classification for student retention is from Dolence (1991).

1. **Persisters:** currently enrolled students
   a. Satisfactory Degree Progress: currently enrolled students who are making satisfactory academic progress
   b. Unsatisfactory Degree Progress: currently enrolled students who have completed an insufficient number of units
   c. Unsatisfactory Grade Point Average: currently enrolled students who have an insufficient grade point average

2. **Graduates:** previously enrolled students who have completed a degree objective

3. **Attainers:** previously enrolled students who have completed a non-degree objective

4. **Transfers:** previously enrolled students who are attending another university
   a. Planned: previously enrolled students who came with the intent of transferring and eventually did transfer
   b. Unplanned: previously enrolled students who did not come with the intent of transferring but eventually did transfer

5. **Stop-Outs:** previously enrolled students who are not attending another university and who maintain a continuing student standing

6. **Drop-Outs:** previously enrolled students who voluntarily decided not to enroll, are not attending another university, and do not maintain a continuing student standing

7. **Dismissals:** previously enrolled students who did not enroll due to university action
   a. Disenrollment: previously enrolled students who did not enroll due to university action taken after financial nonpayment
   b. Academic disqualification: previously enrolled students who did not enroll due to university action after academic disqualification
   c. Administrative disqualification: previously enrolled students who did not enroll due to university action after administrative disqualification
   d. Disciplinary disqualification: previously enrolled students who did not enroll due to university action taken as a disciplinary measure

Appendix O: Sample Measures of Success for UW-Madison Plans

**Graduate School Admissions Office**

<table>
<thead>
<tr>
<th>Goals</th>
<th>Measures of Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refine electronic application. In three years receive all applications electronically.</td>
<td>In 1996-97, the Graduate School received at least 25% of applications electronically</td>
</tr>
<tr>
<td>Provide workshops for academic departments on Graduate School enhancements and initiatives.</td>
<td>Each department has received instruction and every new departmental administrative employee has received training.</td>
</tr>
<tr>
<td>Provide orientation for new graduate students to disseminate information about the campus and Madison.</td>
<td>Positive feedback from students [in post-event evaluation].</td>
</tr>
</tbody>
</table>

**Office of Quality Improvement**

<table>
<thead>
<tr>
<th>Goals</th>
<th>Measures of Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work with various units on campus to highlight success stories in Wisconsin Week and other venues.</td>
<td>Three articles highlighting campus accomplishments in vision priorities</td>
</tr>
<tr>
<td>Facilitate strategic planning with academic and administrative units on campus.</td>
<td>All projects are 3rd milestone; all continuing projects at 4th milestone.</td>
</tr>
<tr>
<td>Design and deliver open enrollment events based on campus planning and improvement needs</td>
<td>Four open enrollment events each semester with 75% of participants highly satisfied per evaluation.</td>
</tr>
<tr>
<td>Establish Home Page on WWW</td>
<td>All current groups with which OQI is working report using WEB resources satisfactorily. Number of hits increases from X per semester to Y.</td>
</tr>
</tbody>
</table>

**Student Academic Services**

<table>
<thead>
<tr>
<th>Goals</th>
<th>Measures of Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expand existing services by electronic means.</td>
<td>Total number of hours available for service increase from an average of X per month to an average of Y per month.</td>
</tr>
<tr>
<td>Investigate the possibility of redirection of existing department-based funds to needy students.</td>
<td>Report created on viability of resources from other campus sources.</td>
</tr>
<tr>
<td>Create transfer student orientation program for graduate students.</td>
<td>By end of the summer of 1999 there will be a 2-day orientation program offered for all transfer students.</td>
</tr>
<tr>
<td>Develop freshman orientation course for credit.</td>
<td>A 3-credit freshman survival skills course will be offered in at least 5 sections for fall of 1998.</td>
</tr>
<tr>
<td>Increase participation by minority students at all orientation events.</td>
<td>Participation by students of color will increase by X% at all orientation sessions.</td>
</tr>
</tbody>
</table>
**ABC Academic Department (a hypothetical example)**

<table>
<thead>
<tr>
<th>Goals</th>
<th>Measures of Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve academic advising process</td>
<td>Each student has an assigned advisor. Academic advising is rated as “excellent” by 75% of recent graduates or . . .</td>
</tr>
<tr>
<td></td>
<td>Chair will send form to students that must be signed by their advisor indicating student measures of progress (Used in development and school psychology areas of Educational Psychology Department.)</td>
</tr>
<tr>
<td>Revise academic advising handbook</td>
<td>100% of faculty use the handbook and report it is “very helpful” to them in advising students.</td>
</tr>
<tr>
<td>Increase retention of students in the undergraduate major.</td>
<td>Percent of students who maintain satisfactory progress beginning with the semester in which they declare the major increases from the current X% to 100%.</td>
</tr>
<tr>
<td>Regain leadership in primordial studies education.</td>
<td>Enrollments in courses PRI 101, 102 and field experience increase and exceed levels for 1994-95 (banner enrollment year).</td>
</tr>
<tr>
<td>Establish undergraduate student organization.</td>
<td>Organization maintains an average of X members and/or sponsors at least one out-of-class learning opportunity for students each semester.</td>
</tr>
<tr>
<td></td>
<td>Members show higher than average rates of 1) entrance into graduate school or 2) retention in the major or 3) GPA or 4) other?</td>
</tr>
</tbody>
</table>
Appendix P: Annual Goal Development Worksheet

**Sample: Office of Quality Improvement**

A matrix like this can be useful for developing annual goals. The core processes down the left side are those essential things we do to achieve our purposes. The strategic directions across the top are literally the strategies we have identified as an office that will help us get over, around or through the barriers while capitalizing on our strengths.

Not every square is necessarily filled in, but the question should be asked, “What does each strategic direction mean for each core process?”

<table>
<thead>
<tr>
<th>Strategic Directions</th>
<th>Core Processes</th>
<th>Strategic Planning &amp; Consulting</th>
<th>Process Improvement Consulting</th>
<th>Data Collection &amp; Analysis</th>
<th>Provide Learning Opportunities</th>
<th>Administrative Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus our efforts where they will best advance the UW mission, vision and priorities</td>
<td>Create and improve connections that foster the advancement of the mission and vision</td>
<td>Build capacity of others for planning and process improvement</td>
<td>Model effective planning and improvement</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix Q: Action Plan Template

(Note: This planning session has one rule: People cannot be assigned tasks unless they are present. If it is unavoidable, then someone in the room is assigned the task of notifying and/or negotiating with the individual.)

<table>
<thead>
<tr>
<th>Unit Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action Plan 200_ - 200_</td>
</tr>
</tbody>
</table>

Goal:

________________________________________________________________________

Measure of Success:

________________________________________________________________________

Goal Point Person (ensures that goal moves forward):

________________________________________________________________________

<table>
<thead>
<tr>
<th>Objective/Activities</th>
<th>Person(s) Involved</th>
<th>Time Frame</th>
<th>Cost</th>
<th>Products/Results</th>
<th>Measure(s) of Success*</th>
</tr>
</thead>
</table>

*Every objective need not have a measure of success.
Appendix R: Worksheet for Identifying Impact Measures

Your Goal:

If your goal doesn’t have an action word in it, refer to Figure 26 for a list of verbs that can be helpful in defining goals. Add the appropriate action word to the goal so that what you intend to accomplish is clear.

1. Who are the stakeholders who will be affected by this goal?
   - Faculty
   - Department Chair
   - Others
   - Staff
   - Other Academic Departments
   - Students
   - Other Administrative Offices

2. What is this goal primarily aimed at?
   - Improving efficiency
   - Monitoring progress
   - Improving effectiveness
   - Other
   - Improving quality
   - Other

3. In your own words, what would tell you that you have successfully achieved your goal?

4. Re-state/refine your answer(s) to question 3 so your measure of success:
   - is clearly defined (so another person in your department/office would understand it)
   - can be measured at the end of the year (assuming annual goals are congruent with the budget year. A planning cycle other than one year may work better in some settings.)
   - can be compared over time
   - tells you (or will tell you) whether the effort made any difference, had any impact
5. Are the data to answer question 4 (your measures of success) available now? If yes, how are we doing right now? If not, how can we get this data? Who will be in charge of collecting it?

<table>
<thead>
<tr>
<th>Data to be collected or to continue being collected</th>
<th>Baseline (How are we doing right now?)</th>
<th>Who is collecting it (or will be) and how?</th>
</tr>
</thead>
</table>

6. At Check Points Throughout the Year

- Are we collecting the data we will need to evaluate at the end of the year?

- What do the data tell us right now? Are things going as planned? Do we need to adjust our plan?

- Questions this information raises?

7. At the End of the Year

- How do the results compare with what we expected would happen?

- What have we learned?

- Do we need to change our hypotheses about cause-and-effect? What do we know about the needs of our stakeholders now? What should we do differently in the future?

- Will the goal and/or measure of success stay the same or change based on this past year’s experience?
REFERENCES AND ADDITIONAL RESOURCES

Section 1:

Section 2:

Section 3:
Section 4:

Section 5:

Section 6:

Section 7:

Section 8

Section 10:
Additional Resources:
OQI has numerous books in our library available for check-out. To browse titles and abstracts, go to http://seeker.doit.wisc.edu/oqirescenter/.