CHAPTER TWENTY

EFFECTIVE MEETING SKILLS II

## Brainstorming and Multi-Voting

Chapter Purpose

Aim. To define the process that a lead improvement team can use to develop a large list of ideas for improving a process and then to systematically reduce the number to the very best ideas.

    Objectives. At the completion of this unit, participants will be able to

• Define the methods and describe the steps in the process of brainstorming and multi-voting.

• Describe the differences between interactive brainstorming, silent brainstorming, and nominal group techniques.
• Apply brainstorming and multi-voting to a topic in order to select a specific change idea to test.
• Develop a process to engage all staff in the review and consideration of the results of the brainstorming and multi-voting session.

For lead improvement team members to work well together it is extremely help-ful if they have good methods for surfacing creative ideas for improvement—the more ideas the better—and if they have a method for selecting the best idea(s) to work on next. Therefore a good time to use brainstorming (to generate ideas) and multi-voting (to select an idea to test) is when the team must decide on what the first or the next test of change will be. This chapter describes both methods (see Figure 20.1).

**FIGURE 20.1. IMPROVEMENT RAMP: BRAINSTORMING
AND MULTI-VOTING.**
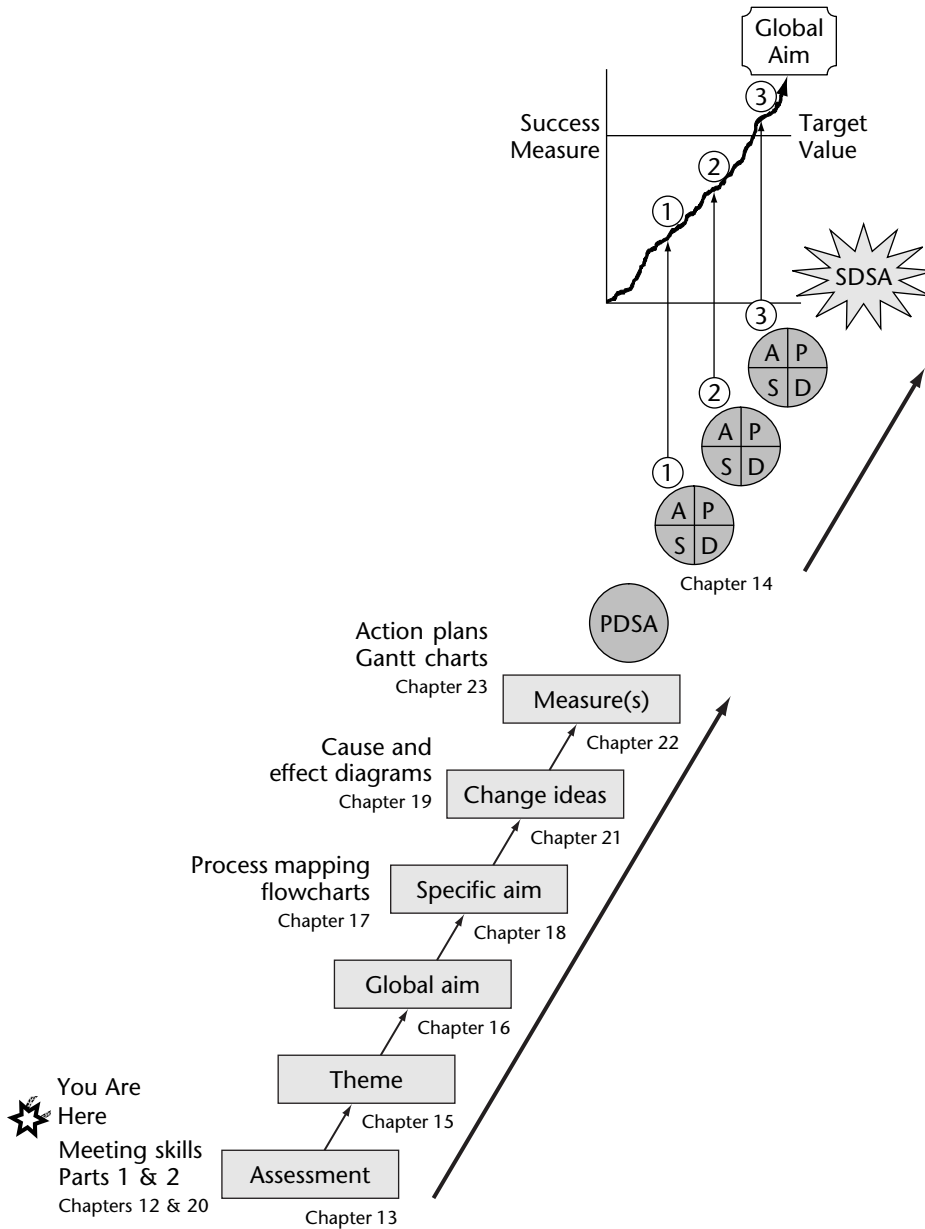
What Is Brainstorming?

Brainstorming is a method of provoking a group of people to generate creative ideas. Brainstorming can be used for many different purposes. Improvement teams often find it useful to use brainstorming to develop a long list of ideas for changing or improving a process or for doing something that is new to the organization.

What Are the Benefits of Brainstorming?

Successful brainstorming involves everyone in the team, encourages creative thinking, generates a great deal of energy and enthusiasm, and produces a long list of ideas.

More specifically, brainstorming

- Involves all members of the lead improvement team in idea generation—no idea is too small, too big, or out of the question.
- Increases the sense of camaraderie among those working on the improvement process.
- Increases team members' ability to listen carefully to others' ideas and to build on those ideas, which increases the team's creativity.
- Produces ideas that are new and different from those usually offered.

What Are Some Different Types of Brainstorming?

There are several ways to conduct brainstorming sessions. This section describes three of them. First, there is *group interactive brainstorming*. This approach can be loud and expressive. When group members think out loud, that stimulates ideas that build on each other, resulting in a list of many ideas. Ideas can be posted on a large flipchart as individuals call them out. It is important for the recorder to capture each individual's idea by writing his or her *exact words* on the flipchart and for others to refrain from commenting on or evaluating the ideas offered.

A second technique is *silent brainstorming*. Each person on the team first thinks about ideas during a silent period and then writes each idea on a Post-it Note and hands the batch of completed notes to the recorder, who reads each idea out loud before posting it on a flipchart. One form of this written, silent brainstorming is called the *nominal group technique*. In this method the team does not engage in a highly interactive form of conversation and idea building; it is literally a group

in name only. Instead, each member of the group quietly writes down his or her ideas, one idea per Post-it Note, for a set period of time. When the idea generation time is finished, the recorder goes around the group eliciting ideas, one at a time, until all ideas are posted. This type of brainstorming works well for highly controversial topics.

It is possible to blend these different brainstorming methods. For example, a team could start with silent brainstorming, giving everyone a chance to think and get some ideas out, and then move to interactive brainstorming.

What Are Some Tips for Conducting Brainstorming?

- Clarify the objective before starting the brainstorming. If the team is not clear on the purpose of the brainstorming session, the outcome is likely to be less productive than desired. It is also helpful to clarify the ground rules about the process, defining what is desired and what behaviors are to be avoided, for example.
- Setting a target that expresses the number of fresh ideas expected (for example, "Let's generate forty ideas in the next ten minutes") can boost the number of ideas produced and encourage creative thinking within a limited time.
- It is usually best to take a few minutes to allow the team members to think quietly about their ideas before engaging in an interactive brainstorming session.
- Set some good practices for team members to follow:
  - Listen to everyone's ideas and build on them. Listen carefully to what others are saying. This often results in more creative thinking than would otherwise be produced.
  - Do not judge, criticize, or comment on other people's ideas. Try to verbalize ideas in rapid succession, and attempt to avoid a commentary after each idea—no facial grimaces or groans! (Multiple recorders who record suggestions alternately may increase or at least maintain the speed of the process.)
  - Do not hold back your ideas, no matter how crazy they seem to you. In fact a far-out idea can open creative thinking in others. Your idea may stimulate someone else to be creative and to come up with a good idea. Feel free to suspend prior assumptions about the topic that you are brainstorming.
- After the ideas have been generated and posted on a flipchart, the leader of the meeting reads each idea out loud, and the team's understanding of the idea is clarified where necessary. The person who contributed an idea is the only person who should clarify that idea.

- Some teams find the use of Post-it Notes helpful in capturing brainstorming ideas. Each idea is written on one Post-it and then placed on a flipchart. The Post-its eliminate the need to erase or cross out ideas. When you review and consolidate similar ideas, you can move the Post-its and group them as needed. Other teams call out their ideas while the recorder for the meeting makes the list. Depending on the size and energy of the team, a second recorder may be helpful during a brainstorming session to keep up with the flow of ideas. It is important for the recorder to write the offered idea using the person's own words, to capture that person's meaning.

- Gathering ideas from the team in a methodical way, going around the team one by one, helps everyone participate. If a member does not have an idea, he or she can simply "pass" to the next person. The rounds continue until all ideas are exhausted.

- Gathering ideas by having all ideas called out, in no particular order, by the session participants has the benefit that ideas are often stimulated by hearing another's ideas. If this approach is used, it may be important for the facilitator to encourage everyone to participate.

What Is Multi-Voting?

Multi-voting is a method that engages all members of the team in agreeing on the best ideas to focus the improvement work on. It involves voting to reduce the idea list generated during a brainstorming session to the top choices. This is accomplished through a series of votes, each round of voting reducing the list and finally resulting in a consensus on a few top ideas to focus on next.

The word *consensus* comes from a Latin verb meaning "to share thoughts and feelings." Consensus does not mean that everyone is in total agreement but rather that everyone is reasonably comfortable with the decision from the team. The process of brainstorming and multi-voting provides an opportunity for all to be heard and for issues and concerns to be explored and discussed to the satisfaction of the team.

Do Teams Always Multi-Vote After a Brainstorming Session?

No. Brainstorming can be used for many different purposes: to stimulate thinking about causes and effects, to increase knowledge about a process, or to make a list of people to consider inviting for an improvement activity. If brainstorming is used

to generate ideas for improvement work, the large list of ideas will need to be narrowed down and this can be accomplished through the multi-voting process.

How Do You Multi-Vote?

1. Review all the ideas generated by the team; the ideas should be read out loud for clarification. Once the ideas are clarified, similar ideas can be merged (with the permission of the people who contributed the ideas).
2. Letter the consolidated list of ideas: the first idea will be labeled A, the second B, the third C, and so on.
3. Each person should be asked to vote for about one-third of the total number of ideas on the list. For example, if the list generated by the brainstorming session contains fifteen ideas, then each person gets five votes to cast for the most promising ideas based on the selection criteria. Team members review the full list of ideas and quietly write their top five choices on a piece of paper.
4. It is important in this step to discuss selection criteria with the team members. When choosing their top choices, what selection criteria should they consider? Here are some criteria often used by teams selecting change ideas to test:
   • *Short lead time.* The test can be started fast.
   • *Low cost.* The change does not cost much if any additional money.
   • *High leverage.* The effort is small in relation to the impact on the process.
   • *Control.* The idea can be tested by the team without getting "permission" from others outside the team.
5. Count the votes. To tally the team's results, the leader of the meeting can use one of several methods:
   • Read each item and ask for a show of hands.
   • Ask each person to put a hash mark next to each of his or her top choices on the flip chart (several people can do this concurrently).
   • Give "sticky dots" to each member to place next to his or her top choices.
6. After each vote the leader can ask if anyone believes that an idea that did not get many votes should be kept under consideration for compelling reasons that should be stated. This is a good time to hold a brief discussion about the remaining items.
7. Once the group has narrowed the original long list by the first round of votes, the list is then shortened again by repeating the process, giving group members a number of votes corresponding to approximately one-third of the new number of items.

8. The voting process is repeated until group members reach general agreement on what they want to work on first (or next).

What Does a Brainstorming Session with a Multi-Voting Outcome Look Like?

Figure 20.2 shows an example of multi-voting. The lead improvement team started with six change ideas (1). Team members combined two ideas (2), they voted for their top-rated ideas (3), and they finished with two change ideas to test using the plan-do-study-act (PDSA) method (4).

Case Studies

Intermediate Cardiac Care Unit (ICCU)

The ICCU lead improvement team was gaining deeper knowledge of its clinical microsystem and becoming very good at employing effective meeting skills in its weekly meetings. Through practice, reminders to each other, and an improvement coach, the team members were making meeting skills a regular habit. An agenda was created during each meeting for the next meeting, and the roles of leading, recording, and keeping time were rotated. The team dynamics were changing, and the enthusiasm remained high. New meeting skills were now required for the tasks of reviewing all the data team members had collected and of coming to agreement on what to change and how "to improve communication of patient plans of care, including discharge, through an interdisciplinary morning round approach." They reviewed the rules for brainstorming and multi-voting to ensure that everyone was part of the solution and the decision making in selecting improvements to test. Their brainstorming session produced the following list of good ideas:

• Interdisciplinary morning rounds in the conference room
• Walking interdisciplinary rounds in the morning
• Resident and attending physicians walking rounds with charge nurses
• All physicians rounding with only the charge nurse

The multi-voting resulted in the team's selecting interdisciplinary morning rounds with all staff in the conference room. The discussion revealed how much the team valued having all staff involved and informed about patient plans of care and discharge plans.

FIGURE 20.2. BRAINSTORMING AND MULTI-VOTING EXAMPLE.

1.

Change Idea List

- MA responsible for patient flow only.
- Support staff arrive 1 hour before clinic opens.
- Standardize exam room supplies and inventory.

- Use assignment sheet to assign MA to stock exam rooms.
- Separate MA role: paper flow and patient flow.
- Standardize rooming with v/s guidelines.

2.

Combine Similarities

A. ~~MA responsible for patient flow only~~
B. Support staff arrive 1 hour before clinic opens.
C. Standardize exam room supplies and inventory.

D. Use assignment sheet to assign MA to stock exam rooms.
E. Separate MA role: paper flow and patient flow.
F. Standardize rooming with v/s guidelines.

3.

Choose Top 1/3 (2 votes)

B. Support staff arrive 1 hour before clinic opens.
    6 VOTES
C. Standardize exam room supplies and inventory.
    6 VOTES

D. Use assignment sheet to assign MA to stock exam rooms.
    2 VOTES
E. Separate MA role: paper flow and patient flow.
    5 VOTES
F. Standardize rooming with v/s guidelines.
    2 VOTES

4.

Top Ideas

- Support staff arrive 1 hour before clinic opens.
    6 VOTES
- Standardize exam room supplies/inventory.
    6 VOTES

Note: MA = medical assistant; v/s = vital signs.

Plastic Surgery Section

The lead improvement team brainstormed ideas for working down the backlog of appointments. Team members reviewed best practices and, through the Institute for Healthcare Improvement, turned to the access improvement work of Mark Murray and Catherine Tantau (2006). They reviewed the suggested list of steps to reduce the backlog to determine what would work best in their practice. The team's initial assessment showed that each physician tended to have a certain pattern of scheduling patients for follow-up visits, that these patterns varied for no apparent reason, and that these follow-up appointments could fill space needed for new patients. The list of brainstormed change ideas to improve appointment access included these approaches:

- Discuss with each physician the need to reduce follow-up appointment frequency.
- Measure demand for appointments.
- Shorten length of appointments.
- Limit the number of appointment types.
- Use shared medical appointments.

When discussion resulted in a deeper understanding of the lead physician's frustration with repeatedly saying the same thing to patients wishing to have breast reductions, the lead improvement team selected the idea of shared medical appointments. The team also realized that the backlog of patients waiting for a first appointment for breast reduction could be drastically reduced through seeing eight to twelve patients in a ninety-minute time period. Through brainstorming and multi-voting, team members determined that they would explore group visits to improve the appointment process and thereby improve access to appointments. They also decided to share the follow-up appointment scheduling variations with all the physicians to increase physician awareness of the variation and possibly encourage each physician to rethink her or his own pattern for scheduling follow-up appointments.

Review Questions

1. What is brainstorming?
2. What are three types of brainstorming?
3. What are the steps for conducting a brainstorming session?
4. When would you use multi-voting after a brainstorming session?
5. What is the difference between brainstorming and multi-voting?

Between Sessions Work

1. Brainstorm and multi-vote to choose a change idea to test that is related to your specific aim statement.
2. Develop a process to engage all staff in the review and consideration of the results of your brainstorming and multi-voting work.
3. Develop a clear plan to test a change idea.
4. Review the plan with all staff.
5. Determine dates and preparation needed to test the change idea quickly.
6. Use the PDSA ↔ SDSA worksheet (Figure A.15 in the Appendix) to guide actions.

Reference

Murray, M., & Tantau, C. (2006). *Shortening waiting times: Six principles for improved access.* Retrieved June 26, 2006, from http://www.ihi.org/IHI/Topics/Office Practices/Access/Literature/ShorteningWaitingTimesSixPrinciplesfor ImprovedAccess.htm.