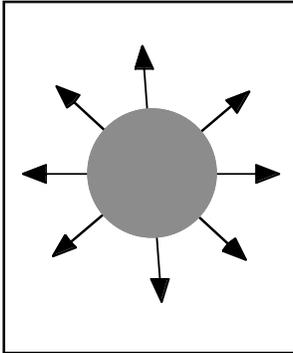# SCAMPER

Overview, Description, and Purpose

SCAMPER is a tool for generating options. It is an example of a tool that uses a checklist, in the form of an acronym. The letters of the acronym are used to remind you of words and questions that will spur the imagination and evoke a variety of new and varied options. The letters represent the following words: S–Substitute; C–Combine; A–Adapt; M–Modify, Magnify, Minify; P–Put to other uses; E–Eliminate; R–Reverse or Rearrange. Each of the words associated with the letters suggests a number of questions that can support the word and trigger the flow of options. These questions often help to open up a wide range of possibilities.

The SCAMPER tool is useful when you:

- Need to change direction in an idea generating session;
- Want to encourage the group to consider new and varied perspectives;
- Are looking for breakthrough ideas;
- Need to speed up the pace of idea generation;
- Want to stretch the group's thinking and help the group move away from their assumptions and past experience with the task or topic area.

Tips and Suggestions

These suggestions may help you to use the SCAMPER tool successfully.

1. When introducing the tool to a group , it can be helpful to use examples involving improvement of, or alternate uses for, familiar or everyday objects. Such examples are easy to deal with, and they stimulate playful thinking and "warm up" (e.g., "How to improve a brown paper bag?").
2. It is not necessary to use the letters and words in the same order that they appear in the word SCAMPER.
3. You do not have to use all the letters and words.
4. Be sensitive to the group's reaction to a particular letter and word. If you spend too much time on a particular letter or word the tool's effectiveness will be reduced.
5. Feel free to build upon, or refine and develop further, any of the possibilities that have been generated using the SCAMPER words.

6. Try using the SCAMPER tool yourself until you feel comfortable with it.
7. As you apply the tool, think about other words or probing questions for the words that might stimulate new options or different perspectives, based on the specific task or as prompted by some of the possibilities the group has already generated. Some of the possibilities might "trigger" new words— and new options! Some examples of probing questions include:

Substitute: What might you substitute? Who else? What else? Where else? What other parts? What other material? What other place?
Combine: What might you combine this object with? Can you combine ideas, objects, or functions? What might this also include or do?
Adapt: What might you change or do differently? What else is this like? What else does this remind you of? What might you copy?
Modify, Magnify, Minify: How might it change if it were bigger or smaller? What might you increase or reduce? How might you enhance or diminish attributes: color, texture, sound, taste, smell, speed?
Put to other uses: Are there other uses for this object? What properties suggest another way to use this? What happens if you change context or purpose?
Eliminate: Is there something you might eliminate? What might you do without? What might you remove?
Reverse or Rearrange: What might you reverse ? How might you reorder this? What if you turned it upside down? backwards? inside out? What if places or roles were reversed? What if you were to rearrange any parts, timing, objectives?

Steps for Using this Tool

1. State the challenge briefly and clearly. Write it on flip chart paper; the participants may also write it on their SCAMPER worksheets.

2. Pick a letter from the *SCAMPER* list. State the word it represents and ask, "What new ideas for this challenge might this word suggest?" Encourage the group members to list several possible responses, and write them down on chart paper.

3. Use several probing questions for this word (see the list on page three) to help the group stretch and go beyond their first thoughts.

4. Choose additional letters from the SCAMPER acronym when you sense that the group needs additional prompting or that they have exhausted the possibilities for any given word. Use any or all of the letters, words, and questions.

5. Review the list of options generated by the group to determine if they have met the stated task or challenge.

6. Decide what the next step is in dealing with the challenge.

Examples and Applications

Some ways to use the SCAMPER tool with students include generating many, varied or unusual possibilities for:

- Varying the climate factors in a specified geographic area, to help students understand the process of "adaptation" or change;

- Exploring possible variations of an initial research question or hypothesis for a class or team project or Science Fair project;

- Considering possible variations in character, setting, costume, or plot to modify or develop a story, theme, or drama;

- Varying colors, media, methods, and materials to develop original art products;

- Planning to improve a classroom, school, or personal study or living area.

Learning More About the SCAMPER Tool

The following sources will help you learn more about this tool:

Eberle, R. F. (1996). *SCAMPER.* Waco, TX: Prufrock Press.

Isaksen, S. G., Dorval, K. B., & Treffinger, D. J. (1998). *Toolbox for creative problem solving: Basic tools and resources.* Williamsville, NY: Creative Problem Solving Group–Buffalo.

Osborn, A. F. (1953). *Applied Imagination..* New York, NY: Scribner's.

Treffinger, D. J. (2000). *Creative problem solver's guidebook. (Rev. Ed.).* Waco, TX: Prufrock Press.

Treffinger, D. J., & Nassab, C. A. (1998). *Thinking tool guides.* Sarasota, FL: Center for Creative Learning..