

Creative Problem Solving (CPS Version 6.1™) A Contemporary Framework for Managing Change

Donald J. Treffinger, Scott G. Isaksen, & K. Brian Dorval

Creative Problem Solving is...

... a model to help you solve problems and manage change creatively. It gives you a set of easy-to-use tools to help translate your goals and dreams into reality. CPS Version 6.1™ is:

Proven. CPS has been used for more than 50 years by organizations throughout the world and is supported by research, with hundreds of published studies on its effectiveness and impact.

Portable. CPS links your natural creativity and problem-solving approaches. It is an easy-to-learn process that can be readily applied by individuals and groups of many ages, in many organizations, settings, and cultures.

Powerful. CPS can be integrated with many organizational activities, providing new or additional tools for making a real difference. It can stimulate important and lasting changes in your life and work.

Practical. CPS can be used for dealing with everyday problems as well as long-term challenges and opportunities.

Positive. CPS helps you to unleash your creative talent and to focus your thinking constructively. When applied by groups, CPS promotes teamwork, collaboration, and constructive diversity when dealing with complex opportunities and challenges.



Center for Creative Learning, Inc.
P. O. Box 14100-NE Plaza
Sarasota, FL 34278-4100
941.342.9928
Fax: 941.342.0064
info@creativelearning.com
www.creativelearning.com
Focus on educational or other non-profit clients



Creative Problem Solving Group, Inc.
P. O. Box 648
Orchard Park, NY 14127
716.667.1324
Toll Free: 888.424.2772
cpsb@cpsb.com
www.cpsb.com
Focus on corporate and business clients

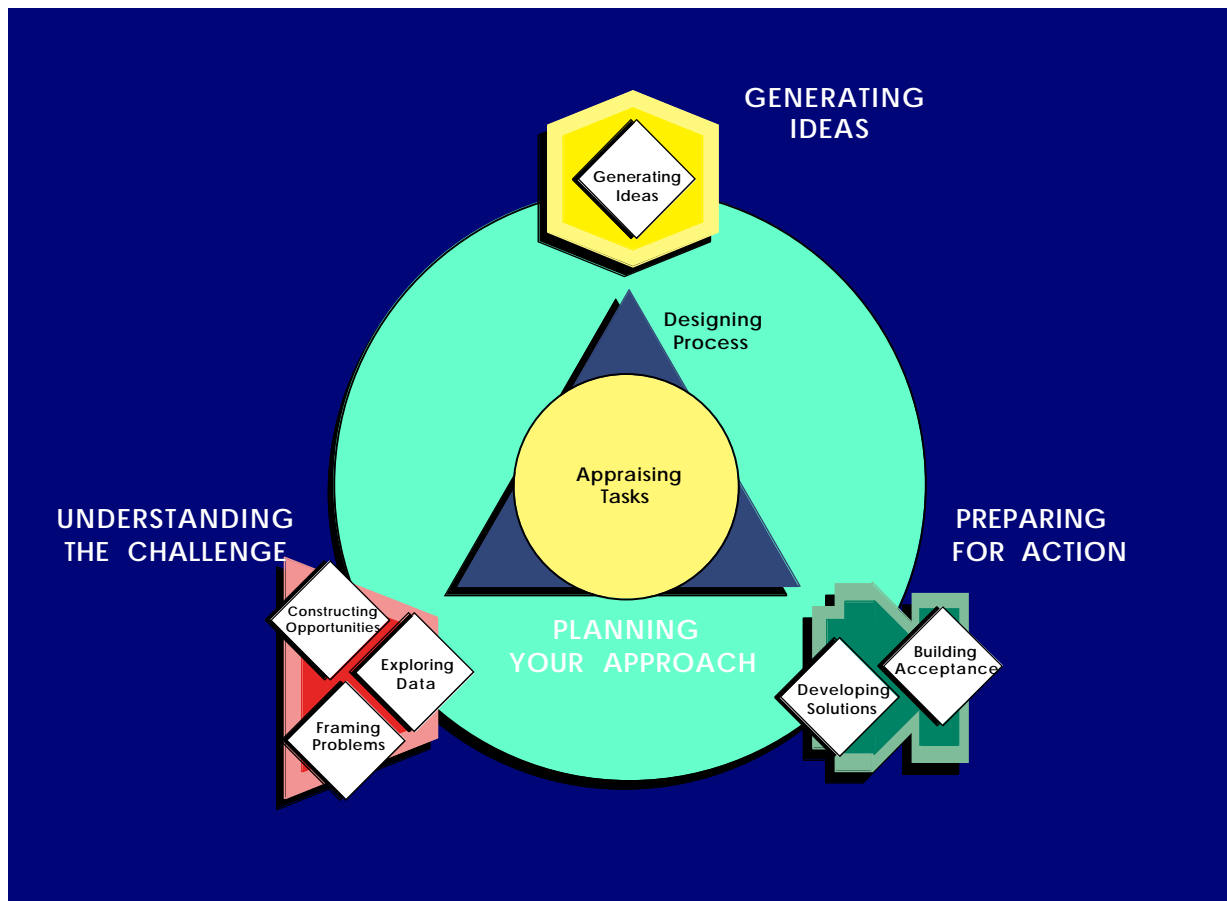
© 2003, Center for Creative Learning, Inc. and Creative Problem Solving Group, Inc.

Duplicated with permission from the websites: www.cpsb.com and www.creativelearning.com

Creative Problem Solving (CPS)— Components and Stages

This pamphlet provides a concise summary of and guide to Creative Problem Solving (CPS Version 6.1™)—the latest version of our framework for solving problems and managing change. This summary of CPS Version 6.1™ includes our latest work and draws upon our texts *Creative Problem Solving: An Introduction, Third Edition* (Treffinger, Isaksen, & Dorval, 2000) and *Creative Approaches to Problem Solving, Second Edition* (Isaksen, Dorval, & Treffinger, 2000).

CPS Version 6.1™ guides you in using both your creative and critical thinking skills in harmony, on your own or in a group, to understand challenges and opportunities, generate ideas, and develop effective plans for solving problems and managing change. CPS Version 6.1™ includes the four main components and eight specific stages illustrated in the figure below and described on the following pages.



The Creative Problem Solving Framework (CPS Version 6.1™)

© 2003, Center for Creative Learning, Inc. and Creative Problem Solving Group, Inc.

Understanding the Challenge

Understanding the Challenge involves investigating a broad goal, opportunity, or challenge, and clarifying, formulating, or focusing your thinking to set the principal direction for your work. *Use one or more of the three stages in Understanding the Challenge when you need to explore and focus your thinking about your goals, objectives, or directions you hope to pursue.*

Constructing Opportunities. Stating broad, brief, and beneficial opportunities and goals. Considering possible opportunities and challenges, and identifying a constructive goal to pursue.

Benefit for you: Constructing Opportunities helps you focus your attention and energy on positive directions— goals that will help you move forward with confidence and enthusiasm!

Exploring Data. Examining many sources of data from different points of view, and focusing on the most important elements of the task or situation. Considering what you know about the situation and what you need or want to know, to get to the “heart” of the matter.

Benefit for you: Exploring Data helps you to locate the key elements in the current realities of your task— factors that help you understand the situation, instead of distracting you from your real goal!

Framing Problems. Generating many, varied, and unusual ways to pose the problem, and then focusing on a specific statement that will “open the door” for and invite creative ideas. It helps you to think about, “How might we...” rather than “We can’t because....”

Benefit for you: Framing Problems helps you to express your problems or challenges in ways that build motivation, excitement, and enthusiasm for discovering and constructing creative ideas!

Generating Ideas

Generating Ideas, which has one stage, involves coming up with many new possibilities. Generating Ideas is viewed by many people as “creative,” and is sometimes (in error) equated with “brainstorming.” We view Generating Ideas as one important component and stage among several in CPS, and we use brainstorming as one specific tool (among many) for generating options. *Use this component and stage when you need to generate many, varied, and unusual ideas for a clearly stated problem, and then identify the promising possibilities.*

Generating Ideas. An open, exploration or search for ideas, in which you generate many ideas (fluency in thinking), varied ideas and new perspectives (flexibility), and unusual or novel ideas (originality), and then focus your thinking by identifying ideas with interesting or exciting potential to refine, develop, and put to use.

Benefit for you: Generating Ideas helps you to “stretch” your thinking, and to break away from the limitations or assumptions that might hold you back. CPS tools give you practical help for thinking that is “inside the box in new ways” as well as “outside the box.”

Preparing for Action

Preparing for Action involves exploring ways to make promising options into workable solutions and preparing for successful implementation. It helps you to take promising solutions and develop them so they're as strong as you can possibly make them, and to consider ways to create the best possible chance of success. *Use one or more of the two stages in this component when you need to move promising new possibilities towards successful action or implementation.*

Developing Solutions. Applying deliberate strategies and tools to analyze, develop, and refine promising possibilities, and to transform them into promising solutions.

***Benefit for you:* Developing Solutions helps you to use practical tools to turn “good ideas” into powerful new solutions.**

Building Acceptance. Considering ways to build support and to decrease or overcome resistance to possible solutions, and planning specific ways to carry out and evaluate your results and effectiveness.

***Benefit for you:* Building Acceptance helps you to implement creative ideas successfully!**

Planning Your Approach

Planning Your Approach involves keeping track of your thinking while it is happening, to insure that you're moving in the direction you want to go. It also guides you in “customizing” or personalizing your approach to applying CPS. *Use these stages when you need to decide whether to use CPS or to monitor, manage, and modify your activities as you apply CPS.*

Appraising Tasks. Determining whether CPS is a promising choice for dealing with a particular task, and taking stock of the commitments, constraints, and conditions you must consider to apply CPS effectively (the *people* involved, the *results* you desire, the *context* in which you are working, and the *methods* available).

***Benefit for you:* Appraising Tasks helps you to get the best from people, resources, and methods—enabling you to decide wisely about applying the method and increasing your chances of success.**

Designing Process. Using your knowledge of the task and your needs to plan the CPS components, stages, or tools that will be best-suited to help you reach your goals.

***Benefit for you:* Designing Process helps you choose and use the components, stages, or tools that you really need—increasing the relevance and efficiency of your efforts.**

For More Information:

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.

Isaksen, S. G., Dorval, K. B., & Treffinger, D. J. (2000). *Creative approaches to problem solving*. (2nd Ed.). Dubuque, IA: Kendall/Hunt.

Treffinger, D. J., Isaksen, S. G., & Dorval, K. B. (2000). *Creative problem solving: An introduction* (3rd Ed.). Waco, TX: Prufrock Press.

Versions of Creative Problem Solving

The following tables depict the emergence and development of our work on Creative Problem Solving, from our historical roots in the Osborn-Parnes tradition to our current work. CPS Version 6.1™ draws upon our history, but also builds on theory and research from the cognitive and behavioral sciences as well as our practical experience in businesses, education, and other organizational settings worldwide. In this summary, we review the essential stages of the development of our work using the familiar notation of computer software (since, in many ways, CPS is “software for the mind”). There have been six major versions of our framework, including our roots in the earlier Osborn-Parnes models; each version also included incremental updates and refinements. A change in the version number indicates a major advance, and a change in the decimal following the version number indicates a refinement of that version.

Making the creative process explicit and deliberate

Version	Publication Date	Description
1.0	1952, 1953, 1957	Alex Osborn’s original description provided in <i>How to become more creative</i> and <i>Applied Imagination</i> outlined the seven-step CPS model
1.1	1963, 1967	Revised description provided in Alex Osborn’s <i>Applied Imagination</i> outlined the three major stages of CPS

Preparing CPS for an instructional program

Version	Publication Date	Description
2.0	1966	Parnes’ Instructor’s <i>Manual for Institutes and Programs</i> outlined the Osborn-Parnes five-stage CPS process
2.1	1967	Parnes’ <i>Creative Behavior Workbook</i> illustrating the CPS spiral included the five specific stages of the Osborn-Parnes approach
2.2	1976, 1977	Noller, Parnes & Biondi’s <i>Creative Actionbook</i> outlined the horizontally framed series of diamonds and the <i>Guide to Creative Action</i> detailed the instructional program.
2.3	1982	Treffinger, Isaksen & Firestien’s <i>Handbook of Creative Learning</i> “rotated” the CPS graphic model to a vertical orientation and provide greater emphasis on the converging phases, introduced new converging tools
2.4	1988	Parnes’ <i>Visionizing</i> version presented a cycle with multiple series of five-stages each; linked CPS to imagery.

Linking person to process

Version	Publication Date	Description
3.0	1985	Isaksen & Treffinger's <i>Creative Problem Solving: The basic course</i> included a deliberate Mess-Finding stage on the front end of CPS (listing outcomes and obstacles, personal orientation, situational outlook, and selecting messes on the basis of ownership), with specific guidelines for creative converging.

Breaking up the process

Version	Publication Date	Description
4.0	1987, 1989, 1991, 1992	Isaksen & Treffinger break the six stages into three major components in some articles and chapters (in an attempt to make the process more usable - people could not “run through” all six stages!). This is the first version that differentiates our approach from Osborn-Parnes

Taking a descriptive approach

Version	Publication Date	Description
5.0	1992	Isaksen & Dorval's articles chapters and course materials break the prescriptive view into a descriptive graphic and approach (providing different pathways through the process)
5.1	1994	Isaksen, Dorval & Treffinger's <i>Creative Approaches to Problem Solving</i> replace a prescriptive CPS model with task appraisal and process planning to guide problem solvers in determining the appropriate approach and use of the CPS framework

Integrating the model into a systemic framework

Version	Publication Date	Description
6.0	1994, 1998	Treffinger, Isaksen, & Dorval's <i>Creative Problem Solving: An Introduction</i> depicts the inclusion of Task Appraisal and Process Planning. CPS version 6.0 has a dynamic, open, flexible system at its core with a clear process planning mechanism, clarifying elements of the system (see also: Isaksen, Dorval, & Treffinger, <i>Toolbox for Creative Problem Solving</i>).
6.1	2000	Isaksen, Dorval, & Treffinger, <i>Creative Approaches to Problem Solving (2nd Ed.)</i> , Treffinger, Isaksen, & Dorval, <i>Introduction to Creative Problem Solving (3rd Ed.)</i> . We used task appraisal and process planning to form the “Planning Your Approach” component as a management or metacognitive component with two specific stages (Appraising Tasks and Designing Process). The CPS Version 6.1™ system now includes four components and eight stages.

References

- Isaksen, S. G. (1989). *Creative problem solving: A process for creativity*. Buffalo, NY: Center for Studies in Creativity.
- Isaksen, S. G. (1996). Task appraisal and process planning: Managing change methods. *International Creativity Network*, 6, 4-11.
- Isaksen, S. G., et. al. (1992). *Current approaches and applications of creative problem solving: A focus on facilitation*. Buffalo, NY: Center for Studies in Creativity.
- Isaksen, S. G. & Dorval, K. B. (1993). Changing views of CPS: Over 40 years of continuous improvement. *International Creativity Network*, 3, 1-5.
- Isaksen, S. G., Dorval, K. B., & Treffinger, D. J. (1994). *Creative approaches to problem solving*. Dubuque, Iowa: Kendall/Hunt.
- Isaksen, S.G., Dorval, K. B., & Treffinger, D. J. (1998). *Toolbox for Creative Problem Solving: Basic tools and resources*. Williamsville, NY: CPSB.
- Isaksen, S.G., Dorval, K. B., & Treffinger, D. J. (2000). *Creative approaches to problem solving: A framework for change*. Dubuque, Iowa: Kendall/Hunt.
- Isaksen, S. G. & Treffinger, D. J. (1985). *Creative problem solving: The basic course*. Buffalo, New York: Bearly Limited.
- Isaksen, S. G. & Treffinger, D. J. (1987). *Creative problem solving: Three components and six specific stages*. Instructional handout. Buffalo, NY: Center for Studies in Creativity.
- Isaksen, S. G. & Treffinger, D. J. (1991). Creative learning and problem solving. In A. L. Costa (Ed.), *Developing minds: Programs for teaching thinking* (Volume 2, pp. 89-93). Alexandria, VA: Association for Supervision and Curriculum Development.
- Noller, R. B., Parnes, S. J., & Biondi, A. M. (1976). *Creative actionbook*. New York: Scribners.
- Osborn, A. F. (1952). *How to become more creative: 101 rewarding ways to develop potential talent*. New York: Scribners.
- Osborn, A. F. (1953, 1957, 1963, 1967). *Applied imagination: Principles and procedures of creative problem solving*. New York: Charles Scribner's Sons.
- Parnes, S. J. (1966). *Manual for institutes and programs*. Buffalo, NY: Creative Education Foundation.
- Parnes, S. J. (1967). *Creative behavior guidebook*. New York: Scribners.
- Parnes, S. J. (1967). *Creative behavior workbook*. New York: Scribners.
- Parnes, S. J. (1988). *Visionizing*. Buffalo, NY: Creative Education Foundation Press.
- Parnes, S. J., Noller, R. B., & Biondi, A. M. (1977). *Guide to creative action*. New York: Scribners.
- Treffinger, D. J., Isaksen, S. G., & Firestien, R. L. (1982). *Handbook for creative learning*. Sarasota, FL: Center for Creative Learning.
- Treffinger, D. J. & Isaksen, S. G. (1992). *Creative problem solving: An introduction*. Sarasota, FL: Center for Creative Learning.
- Treffinger, D. J., Isaksen, S. G., & Dorval, K. B. (1994). *Creative problem solving: An introduction* (Revised edition). Sarasota, FL: Center for Creative Learning.
- Treffinger, D. J., Isaksen, S. G., & Dorval, K. B. (2000). *Creative problem solving: An introduction* (Third edition). Waco, Texas: Prufrock Press.