



Clarifying our CPS Vocabulary

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Each time the three of us work together and synthesize our unique experiences with research findings, we benefit greatly from taking the time to examine our use of language in writing about CPS (Creative Problem Solving). This was particularly the case in writing our most recent book, *Creative Approaches to Problem Solving* (CAPS - Isaksen, Dorval, Treffinger, 2000) in which we present our current approach to CPS. We call it CPS 6.0; using a computer software analogy, the book describes version 6.0 of the CPS system. As three authors collaborating on the same book, we re-learned the importance of being precise, concise, and consistent in our use of language – particularly since we were seldom in the same place at the same time when we were writing.

In this article, we will outline a few of the key words that we found challenging and share the results of our dialogue about their meaning and definition. We hope this will help you to be productive in your own dialogue about CPS and your use of CPS.

Creativity and Innovation

Many people have attempted to define creativity, with no universally accepted result (Aleinikov, Kackmeister, & Koenig, 2000; Treffinger, 1995). We have offered a few definitions of our own, and we, like many others, usually end up with something that reflects the complexity and multi-dimensionality of the concept. Frequently, these efforts result in an overview of the conceptions of creativity that synthesize the characteristics of creative people, the operations of the creative process, the nature of the context that supports creativity, and the dimensions of creative outcomes or products.

One practical and useful definition developed by our colleagues at the Center for Creative Leadership holds that creativity is *novel associations that are useful*. This compressed conflict reflects the tension inherent in the concept of creativity, but also makes sense to people from varying walks of life and in many organizational settings.

When we use the word creativity to mean novelty that is useful, we assert that creativity includes the generation of alternatives and the development of something valuable from them. Those who limit the word creativity to only mean generating ideas need to use other words, like innovation, in order to include the concept of transforming ideas into something valuable or useful.

Innovation seems to have widespread popularity, and seems easily accepted among professionals within organizations. Typically, *innovation is used*

to emphasize the commercialization of new ideas. Those who prefer to use the word innovation instead of creativity usually focus on implementing ideas in the form of concrete products and services. This word choice may occur because they see creativity as more concerned with freedom, imagination, the process of generating novel ideas. On the surface, this may suffice, but looking deeper reveals a few challenges.

When people use the word innovation, they run the risk of over-emphasizing creating results, outcomes, or products. This creates at least two important practical implications. First, over-emphasizing product may lead to forgetting about other important factors necessary for innovation (i.e., the people, the process, or the place). In fact, most organizational change efforts fail because of a lack of attention on the people, the processes and operations to be followed, or managing the climate in which they happen (Isaksen, Dorval, & Treffinger, 2000).

Second, over-emphasizing product may also limit people's thinking and behavior to the term useful in the definition, *novelty that is useful*. It may imply that creativity is nothing more than coming up with novelty or generating ideas. This can reinforce some of the more non-productive creativity mythology (i.e., creativity is only about having fun and less concerned with implementation, contribution, or solving real problems).

To help alleviate some of the unnecessary tension in the language, we developed the following definitions: *Creativity is making and communicating meaningful new connections*. Our use of the word creativity includes an emphasis on product, along with people, process, and place. *Innovation is the product or result-focused perspective on creativity that emphasizes the commercialization of new ideas*. We see innovation as a subset of creativity.

Creativity methods, models, processes, and frameworks

When we first started working in the creativity field, everyone was using the words method, model, and process interchangeably. Instead, we propose differentiating them in order to be more clear and concise about what is meant. We also believe it is important to distinguish these three from the word framework.

We use the word *process* to refer to a natural phenomenon marked by gradual change that leads toward a particular result. *It is usually defined as a series of actions or operations leading to an end*. A process implies moving from one 'place' to the next using specific activities.

A method is a specific manner or systematic way of doing something. The word method implies something that is regular, orderly, and logical. Methods usually contain processes, organized sets of tools, and procedures for dealing with tasks.

A model is a representation designed to illustrate something that is complex, abstract, very large and extensive, or not directly observable. Models

help us view the form or structure of what they represent. Common kinds of models include graphical, mathematical, or physical representations. Our presentation of the components and stages of CPS in graphic form, or as a structured set of terms, would be examples of models that illustrate the change method we call CPS.

A framework is a basic structure holding the parts of something together. It is a structure, like a skeleton or rack for hanging coats. The CPS framework includes components, stages, and tools and is used to organize and arrange such things as language, tools, and procedures in ways that they can be used in any order or sequence. The pictures people see of the CPS framework in books or during training courses are visual representations or models of a complete creative process. (The model illustrates the elements of the framework that combine to make the CPS method work.)

We believe that having a more precise understanding of method, model, process, and framework, will help you talk more productively with others about your approach to the creative process, and avoid unnecessary confusion - particularly when talking about different methods, models, and frameworks of the creative process.

Technique, tool, and strategy

One of the most common sources of confusion in the creativity field is the use of language around tools and techniques – us included. Often lumped into this group are also words like methods and strategies. We addressed the definition of method above. Let's turn our attention to pulling apart technique, tool, and strategy.

The confusion about technique versus tool became particularly clear before updating CAPS when we were conducting a literature review in preparation for writing a book on creativity tools (Isaksen, Dorval, Treffinger, 1998). We had difficulty understanding what authors meant when they used terms like technique or tool. Some techniques seemed to describe the actual device (i.e., the form, handout, card, etc.) while others described how the devices were used. Some techniques seemed to be slight modifications of tools with new titles. Before we could go further, we found it necessary to distinguish between the device itself, and how it is used.

We now see *tool as a specific device or implement that aids in accomplishing an operation or task*. Literally, a tool is an instrument or implement used in performing an operation. Tools are usually applied in the practice of a vocation or profession and are designed to serve a specific purpose or function. Problems solvers also have many different tools at their disposal. CPS includes a suite of thinking tools - some designed to help people generate alternatives and others to help them screen, select, and develop options.

Technique refers to the way someone uses a tool. It is the mode or manner of implementing a tool. Technique refers more to the characteristic fashion, style,

or way someone approaches or “customizes” the use of a tool to accomplish a task. Many tools can be modified for use under varied circumstances such as the personal preferences of the users, the particular needs to be met, the conditions within the situation, and the nature of the tool itself. For example, we often use an excursion-like tool called Forced Fitting – using objects to stimulate new thinking. Some groups respond by taking a short walk outside the meeting room to find their own object, rather than all responding to the same object.

A strategy is different from a technique or a tool. *A strategy is the overall plan for using a tool.* This includes how different techniques will be used to meet the demands of the given task. A strategy may contain a single or multiple techniques to be used for getting the best results from a tool.

Distinguishing among these terms can help you clarify what you mean. If you are considering different devices to aid your thinking, you mean tool. If you are thinking about how to modify a tool to make it work better in your particular situation, you are talking about technique. If you are considering a plan to get the best use from your tool(s) and techniques, you’re thinking about strategy.

Brainstorming

By far, Brainstorming is the most overused and least understood word in our vocabulary. The popular meaning of the word provided by most dictionaries is as a noun – Brainstorm is a sudden fit of inspiration (or insanity, as some think of it!), the occurrence of a surprisingly bright idea, or any hare-brained idea. We have heard the word Brainstorming used to mean a discussion with others, time for personal reflection, an argument among group members, a chance to sell a particular idea, or even a formal presentation. These definitions and perspectives are very different than what the originator of Brainstorming said about the tool.

Alex Osborn is often credited for being the first to introduce the word Brainstorm for use in the field of advertising. Osborn introduced *Brainstorming as a thinking tool to help people working in groups better apply their imaginations when generating many, varied, and unusual ideas to solve a specific problem.* As the first participants of Brainstorming sessions described it, brainstorming “was using the brain to storm a creative problem – and to do so in commando fashion, with each stormer audaciously attacking the same objective ” (Osborn, 1953, p.297). Osborn introduced Brainstorming in response to the many unproductive meetings he experienced during which people were judging ideas while they were attempting to generate them.

Brainstorming, as Osborn described it, includes four specific guidelines (see Figure 1) to help create the appropriate conditions, specific procedures to prepare the problem under consideration, and suggestions to prepare the group of participants before, during, and after its use. However, we recognize that the four guidelines Osborn introduced are equally important and useful whenever groups need to generate alternatives. As a result, we refer to them as guidelines for generating options. (Options might be ideas, but can also include opportunity

statements, problem statements, data of all kinds, criteria, or actions for implementation.)

Brainstorming has been the subject of many variations in technique. Some facilitators have participants take turns following a particular sequence in order to even out or distribute participation. Others ask all participants to write down their ideas on little blue slips or Post-it® notes to get everyone's ideas considered and to encourage people to remember their ideas. When we ask groups if they are familiar with Brainstorming, most people say they are, and that they use Brainstorming frequently. When asked to state the four guidelines, however, they often have difficulty identifying them.

Conclusion

We hope that our experiences in writing about CPS, and the resulting dialogue about clarity of thought and language, will help you to keep your CPS language aimed at "possibility thinking" – where you're generating or focusing in on a compelling image of the future, key problems to address in unlocking a challenging situations, or identifying specific steps to take in transforming your solutions into reality. We also hope that being precise, concise, and consistent in your use of CPS language will enhance your efforts to understand and apply CPS effectively. For your information, we have identified some additional readings and references below that might help explain further the updated CPS language.

References and Further Reading

- Aleinikov, A. G., Kackmeister, S., & Koenig, R. (Eds.). (2000). *Creating creativity: 101 definitions (what Webster never told you)*. Midland, MI: Northwood University, Alden B. Dow Creativity Center.
- Isaksen, S. G., Dorval, K. B., & Treffinger, D. J. (2000). *Creative approaches to problem solving: A framework for change*. Dubuque, Iowa: Kendall/Hunt Publishing.
- Osborn, A. F. (1953). *Applied imagination*. NY: Charles Scribner's Sons
- Treffinger, D. J. (1995). *Creativity, creative thinking, and critical thinking: In search of definitions*. Sarasota, FL: Center for Creative Learning.
- Treffinger, D. J. (1997). Toward a more precise, concise, and consistent language for productive thinking instruction. *Creative Learning Today*, 7 (1), 1+8-9. Sarasota, FL: Center for Creative Learning.
- Treffinger, D. J., Isaksen, S. G., & Dorval, K. B. (2000). Adventures in wonderland – Clarifying our CPS vocabulary. *Creative Learning Today* 9(3), 8+12. Sarasota, FL: Center for Creative Learning.
- Treffinger, D. J., Isaksen, S. G., & Young, G. C. (1998). Brainstorming: Myths and realities. *National Inventive Thinking Association Newsletter*, 1-3+.

