## Book Review: Innovation Training by Ruth Ann Hattori and Joyce Wycoff

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*Innovation Training* is published by the American Society for Training and Development, and can be ordered from their bookstore, <u>http://www.astd.org/astd/store</u>. Soft cover, 205 pages with a CD included. ISBN: 1562863665. US\$46.95.

*Innovation Training* is a well-organized workbook bringing together a large body of knowledge about innovation in a form that can be easily applied by innovation trainers in a broad range of training situations. Authors Joyce Wycoff and Ruth Ann Hattori are well-known consultants and authors, with extensive experience in the cultural changes needed to support innovation initiatives.

Chapters are 'bite-sized' and well laid out – each starts with a short introduction and ends with 'next steps'. Workshop plans are detailed and well scripted, with mind maps outlining the main steps and timing. It provides, in an integrated package, detailed "how-to" level instructions seldom found in creativity books. Extensive visual material is provided on the enclosed CD, including PowerPoint presentations that can be modified for specific training needs, templates, and handouts for participants. It includes survey instruments to assess an organization's environment for creativity, perform course evaluations, and deliver 7-10 day follow-up surveys.

The book is organized in three parts:

- Overview and introductory material
- A set of 'canned' workshops
- An extensive set of 'components' (learning activities and handouts) that can be assembled into custom workshops

Although the book does not include an index, it is relatively easy to find material using the table of contents

The content of the book covers:

- The value of innovation
- The impact of training on the innovation process
- The InnovationDNA model, a combination of operational principles, culture and context
- Adult learning models
- The process of innovation training
- Divergent thinking, to generate new ideas (with 5 tools complementary to each other, any or all of which can be used to accomplish idea generation)
- Convergent thinking, to evaluate, document and 'bullet-proof' ideas (with another 5 tools)
- Information on Personal Innovation Competencies (self-rating, gap analysis, ideas for improvement)

The book addresses the cultural and contextual aspects of innovation – emphasizing that without these foundation elements, innovation can easily turn into a 'one-shot' exercise that does not provide sustained value creation. Recognizing that cultural change takes time and occurs over many fronts is critical to setting reasonable expectations about integrating innovation into an organization. Although the definition of innovation as "people creating value by implementing new ideas" seems contrived, it does focus attention on the collaborative nature of innovation as well as the importance of execution and results.

The book covers various ways of evaluating training, but does not discuss how companies can directly measure the value of innovative ideas to the organization. Another major oversight, in the context of explaining how innovation truly happens in an organization, is little mention (a single question in the mini-audit) of the importance of strategic "top down" management interest and support, which must be considered in the use and implementation of the excellent training materials in the manual. Perhaps it is beyond the scope of this book to provide details on how to "reduce to practice" good ideas once selected, but a section addressing the need to build the network of supporters, especially senior level sponsorship, is notable by its absence (a TRIZ weakness, as well). Innovation efforts can go for naught, or worse, cause frustration or cynicism without some certainty and financial support that the organization is willing to do new and different things.

*Innovation Training* is a basic, but complete, introductory training manual for contemporary, psychology-based idea generation which can be complementary or introductory to the TRIZ methodology. The workbook does give methods for convergent thinking, to organize and select ideas for further pursuit, an area in which TRIZ is traditionally weak.

The book does not provide techniques for exploring and properly defining problems, which are frequently interpreted as ever-rising expectations driven by customer interaction and corporate strategic intent. Proper problem definition (a key aspect of TRIZ), if added to this manual, would greatly increase its commercial practicality. TRIZ focuses on problem solving, not just generating ideas. The process of innovation itself (as described in this text) prescribes traditional creativity techniques that do not facilitate utilization of knowledge from other disciplines, one of the strengths of TRIZ. The exercises relating to 360 degree thinking are similar to the System Operator or "9 Screens" thinking used by many TRIZ practitioners, but without explicit references to the time and system dimensions.

At many points in the method, incorporation of simple TRIZ techniques (such as the 40 Principles, Ideal Final Result, Resource Utilization, Separation Principles) would make the efforts far more effective. Whereas the 'quadrant collaboration' approach for evaluating ideas would sort out solutions containing tradeoff or compromise, TRIZ would recognize, accentuate, and resolve them. TRIZ addresses all of these areas through an extensive set of tools and methodologies, but does not cover the environmental factors

required to make innovation effective. It is surprising that there are no TRIZ references in the list of resources, nor any mention of some of the newer (compared to brainstorming, etc.) TRIZ techniques. Since the techniques described in this manual are broadly used in industries, it can provide value to TRIZ practitioners who are trying to understand the culture and background into which they are attempting to introduce TRIZ problem definition and problem solving techniques.

The challenge for our TRIZ community is to generate a guidebook that is as clear, concise, integrated and "how-to" as is *Innovation Training*. By outlining the TRIZ mindset and tools, and providing the supporting presentations and handouts, it would encourage broader, but proper use of the most productive TRIZ tools and methods. Some of the pocket guides from Creax are a step in this direction, but materials directly ready for use with teams are needed.

Near-term, many TRIZ teachers would benefit from using the *Innovation Training* system where it has strengths, to supplement their TRIZ work. Since the rights to duplicate the handouts, use all the exercises, and even reproducible materials for classroom presentation are included, this is an incredible bargain for people who are building training programs.