

## What is going on with TRIZ?

In order to inform the members of ETRIA about activities in the field of innovation and especially TRIZ, we want to establish a Newsletter at least three times per year. The ideas and proposals of readers are welcome.

### Activities of ETRIA-Groups in Europe

**Latvia:** Learning foreign Languages, esp. English, using TRIZ-Tools.

See Article of Maria Dobrovolska, Julia Galpern, Edgar Lasevich and Alexander Sokol  
The Thinking Approach to language teaching as a tool for the resolution of the key contradictions of language teaching and education.

<http://www.thinking-approach.org>

**France:** the very first academically recognized diploma related to TRIZ (Master of Innovative Design) has started last February for his first session at INSA Strasbourg. Seven companies have already sent their engineers to acquire the theoretical and practical skills in order to be able to restructure their innovation process for a successful TRIZ introduction in their organization.

Information about the second session and the up-to-date file for application are downloadable at : [http://www.insa-strasbourg.fr/3eme\\_cycle/conception\\_innovante\\_en.php](http://www.insa-strasbourg.fr/3eme_cycle/conception_innovante_en.php)

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### Activities of other organisations

**First gathering of the SIT (ASIT) Innovation Community in the Netherlands**, 22.June, 2004 at Antropia, Driebergen. ([www.sit-netherlands.com](http://www.sit-netherlands.com))

### Conferences / Congresses

Die **ETRIA World Conference TRIZ Future 2004** will be held in Florence / Italy in the autumn, this year (3.-5. Nov. 2004). The deadline for the call for papers is postponed to 04.07.2004. See actual information at [www.etria.net](http://www.etria.net).

## From Journals related to TRIZ

**Process Modeling, Simulation, and TRIZ: An Innovative and Symbiotic Solution** By: Charles Sorgie.

Author shows a problem analysis using simulation: the number of casualties after a sudden viral attack on the workforce of a company and its dependence on different countermeasures. In this complex situation the simulation revealed unexpected results and proved to be indispensable.

<http://www.triz-journal.com/archives/2004/05/01.pdf>

**Book Review: Solving Problems with TRIZ (An Exercise Handbook)**  
**by Dr. Vladis Kosse, Second edition, revised and expanded**  
(published by Ideation Int.)

The new edition includes 188 problems (the old one 170), of which a solution is given for 73% (before: 48%). The “Pros”: among other points a broad range of (partially: sophisticated) problems as material for practicing. The “Cons”: too little explanation and pictures in many of the problem descriptions and tools (mostly taken from the Innovation Workbench of Ideation without explanation). The review gives recommendations for an improved edition.

<http://www.triz-journal.com/archives/2004/05/07.pdf>

**Serious changes in the educational system are waiting for us (Essay on the new function of education)**

Anatoly Guin states, that the amount of knowledge of mankind is further growing rapidly, while problems become more complex and cannot be solved by a single discipline. As a consequence, techniques for the acquisition of knowledge have to be taught and “solvers” have to be trained. G. gives some targets.

<http://www.triz-journal.com/archives/2004/04/02.pdf>

In his second article: **School-factory will die. What’s on? (Education during the change of civilizations)** Anatoly Guin claims, that so far (with exceptions, as he says) education had the target of well “functioning” people, whereas today man has to choose from the wide range of possibilities, to decide, to invent new solutions. He gives some “Principles” for the “Technique of Teaching”:

- Principle of free choice – and responsibility for ones choice
- Principle of openness (to know that knowledge is limited, that beyond there are problems)
- Principle of activity (to see, how knowledge is used)
- Principle of back communication (encourage to give feedback)
- Principle of ideality (self-organising of students, if their resources are used optimally)

These principles are not new ones, but to think about them of course necessary.

<http://www.triz-journal.com/archives/2004/04/03.pdf>

#### **40 Inventive Principles with Applications in Education**

By: Dana G. Marsh, Faith H. Waters, Tabor D. Marsh. This seems to me to be a collection of well known ideas for the organisation of school administration and classroom work, arranged to correspond to the list of the 40 Principles.

<http://www.triz-journal.com/archives/2004/04/04.pdf>

#### **Further material on education (which is not new):**

##### **Fairy Tales School: Course of Creative Imagination Development (CID)**

(Based on Theory of Inventive Problem Solving (TRIZ)) METHODICAL GUIDE-BOOK, last parts published in March, 2002. The curriculum is laid out for the 1<sup>st</sup> to 3<sup>rd</sup> grade, 1 hour per week.

**Why** mention this material again? Besides being a real curriculum, it partially is well suited to be used by pedagogical laymen also (e.g. parents, grandparents like me) to “play” with children (or adults) and **to develop creativity** in doing this.

With my grandchildren (6 – 10) we had fun

- imagining the “glass city”, where everything is made of glass;
- creating a story, whose essence is a well known proverb;
- thinking about variations of the rules of games and the consequences for the game;
- inventing a story, which connects two words, chosen at will from a book.

I hope they will stay with me, when it comes to solving more than playful tasks by the use of principles, resources and ideality! The curriculum is from Mrs. N Rubina, Petrosavodsk, based on material from G. Altshuller and his students. Prof. T. Nakagawa (Osaka, Japan, Gatwin University) got it translated and published it on the TRIZ Home Page of Japan.

[www.osaka-gu.ac.jp/php/nakagawa/TRIZ/eTRIZ/electures/eRubinaCIDbook0/eRu](http://www.osaka-gu.ac.jp/php/nakagawa/TRIZ/eTRIZ/electures/eRubinaCIDbook0/eRu)

**COUNTRY OF RIDDLES** was written in 1994 by Alla Alexandrovna Nesterenko. This article is composed of material accumulated during lessons, which are given in classes of elementary school #30 of Petrozavodsk. The official name of the course is "Development of creative thinking using elements of theory of inventive problems solving (TRIZ)".

<http://www.trizminsk.org/eng/index.htm>

**Analysis of Research and Literature on Creativity and Education** by A Craft is part of a report to the British Qualification and Curriculum Authority (QCA) from 2001 (37 pages!). It deals with activities in other countries also and contains “How can You Promote Creativity?”

[www.ncaction.org.uk/creativity/creativity\\_report.pdf](http://www.ncaction.org.uk/creativity/creativity_report.pdf)

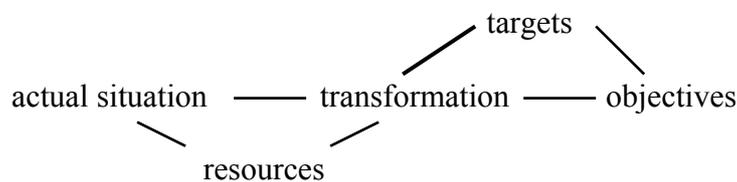
## Doctoral thesis on TRIZ:

**Sven Wenzke, Cottbus 2003**

### **Flexible Organisation of the Problem Analysis for Technical Problems with TRIZ-Tools**

(German: “Flexible Gestaltung des Analyseprozesses technischer Probleme mit TRIZ-Werkzeugen”, Deutscher Universitätsverlag)

According to inquiries, made by W., the poor use of the TRIZ-Tools is the consequence of a lack in easy-to-use methods, in recommendations for the utilisation of the existing ones and lack in an uncomplicated support by computer programs. This applies especially to small and middle-size companies. W. suggests further development. At present he recommends the “PI-Methode” (“Problemzentrierte Invention”) by Möhrle and Pannebäcker. “PI” arranges all the steps from the actual situation to target in 5 areas (Müller – Merbach):



The TRIZ-Tools are assigned to these fields. W. emphasises the flexibility of “PI”: Generation of ideas and steps back are possible in all phases of the process. The rest of the book mainly is a report on existing methods: Software programs of Ideation (especially Problem Analysis) and Invention Machines (among others Object Analysis), in comparison also.

Function Analysis with graphs is recommended. Tests show that the analysis is broader and deeper, when graphs are used. W. tries to create a unit of measurement for the quality of structural graphs from the number of relations between functions etc., which seems to be of debatable value.

## Information of the MATRIZ Association (Russia)

**Valentina Nikolaevna Zhuravleva**, the wife of **G. Altshuller**, died 12. March, 2004.

A TRIZ Workshop for advanced TRIZ Users is held at St. Petersburg 11.-13. May, 2004 by Gen3 Partners.

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