

# Agora eBuzz

Institute for 21st Century Agoras

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## Online Course in Sustainability

A combined class of Australian and American students participated in an online course in Sustainability with academic credits awarded through the University of Flinders (Australia). The four-week course ran from March 21 - April 10 with the objective of developing a global "problematique" and identifying the most influential elements in its structure. The course was based on a set of 49 "continuous critical problems" (CCPs) identified in by Hasan Ozbekhan, Alexander Christakis and Erich Jantsch and reported in the Prospectus of the Club of Rome in 1970. Though 40 years old, this list of CCPs still retains its contemporary relevance. What has changed, of course, are some of the relationships among CCPs.

Historically, the Club of Rome did not have group decision support tools at its disposal in 1970 and thus was not informed with a collaboratively-generated systems view which included the many qualitative dimensions of the sociotechnical problems confronting mankind. Over the years, great progress has been made in the application of expert analysis tools, beginning with early uses of systems dynamics modeling (see *Limits to Growth*, 1972). The strength of insights based on expert use of systems dynamics over the years has however contributed far more to academic debate than to social action. The reason for this is that collaborative action requires collaborative participation in shaping an understanding of the situation as a problem which must be solved collectively. The online course introduced students to tools for shaping shared views.

One of the outputs of the course was a map showing the structure of influence relationships among CCPs. This task was a reenactment of the use of interpretative structural modeling to "structure" CCPs in 1995. The reenactment in the class thus comes after 15 years of social evolution across the planet. Starting the class with labels for the original set of 49 CCPs and an understanding of the challenges faced by the Club of Rome at that time serves as a case for Problem-Based Learning. In all case studies, the efforts to be authentic to the original situation are at best approximations. In our course, students were challenged to infer an understanding of what lay beneath the labels in the set of CCPs, and then to seek out current corroboration for those understandings as genuine "continuous critical problems" based upon accounts reported in contemporary sources. Each course participant was assigned individual accountability for a small set of CCPs. The objective was to have students engage the content in the role of an expert. The Students could not be expected to become "expert" in these realms of understanding within the scope of our course; however, perspectives were divided up sufficiently so that all students easily recognized that no one of them could possibly have the whole picture in mind.

Students entered their assigned CCPs into a wiki, and added clarifications which included URLs to websites where background content could be found to substantiate their understanding of the

problem. After a period of "clarification," students were convened into an online "meeting" where a screen sharing and voice-over-Internet linkage provided access to a group-ware facilitated dialogue about the strength of influence that the group felt existed among CCPs in today's global situation.

We will (of course) direct you to published works that we expect to result from this experimental online class. In brief, the resulting "tree" had 6 levels. The drivers on the deepest level (VI) were in a cycle, that is, they mutually influenced each other. They were CCP 37 Growing use of distorted information to influence and manipulate people and CCP 34 Fast obsolescing political structures and processes. Immediately above this cycle was another cycle CCP 49 Insufficient understanding of the Continuous Critical Problems and CCP 18 Growing irrelevance of traditional values and continuing failure to evolve new value systems. It was the conclusion of the participants that addressing these four CCPs is essential for coming to grips with the global problematique.

After the class had created its own map, class participants were directed to review a comparable map that was constructed by a small expert team in 1995 (see Christakis, 2006). The 1995 team used 24 CCPs to construct an influence map consisting of seven levels. Their deepest driver was CCP 18 Growing irrelevance of traditional values and continuing failure to evolve new value systems. One step up on Level VI was a cycle of CCP 15 Generalized lack of agreed-on alternatives to present trends and CC 49 Insufficient understanding of Continuous Critical Problems.

In comparing the 2010 results to those of 1995, several things stand out. CCP 37 Growing use of distorted information did not make even the list of 24 CCPs picked as very important in 1995. It would seem that information is either more distorted now or we are now more aware of the distortions. The other deepest driver in 2010 CCP 34 Fast obsolescing political structures and processes is not nearly so deep in the 1995 influence tree. We may be more painfully aware of this obsolescence now. The deepest 1995 driver CCP 18 Growing irrelevance of traditional values and continuing failure to evolve new value systems is still a deep driver in 2010, but not so deep. It could be that value systems have developed and hardened in the intervening years.

In response to the question "why is this course particularly noteworthy" we have three points to make. First, historic reenactment of the structuring event promotes insights into how apparently modest shifts in some CCPs may have had strong impacts on a larger system of CCPs. Students capture a sense of systems change through an immersion into the issues that shape that situation. Second, this class builds capacity for students to explore options for actions on specific problems of today through a systems understanding of the moment. And third, students come to appreciate the critical role that is played by including an appropriate diversity of genuine experts into appropriately-supported discussions that are truly of an interdisciplinary nature.

While this course was a challenge for students and first time instructors, and while the course most certainly has some lingering technical and philosophical issues to address, the course represents a contribution in the emerging practice of Problem-Based Learning which is rattling the cages of educational traditions in efforts to allow students to break into new modes of participatory interaction with content and with each other.

Reference:

Christakis, A.N., 2006. A Retrospective Structural Inquiry of the Predicament of Humankind Prospectus

of the Club of Rome, Chapter 7 in *Rescuing the Enlightenment from Itself: Critical and Systemic Implications for Democracy* (Janet Judy McIntyre-Mills, editor), Springer Science & Business Media, Inc.

## **Report on the Cyprus Co-Laboratories**

From mid December to mid February, Cypriots conducted 10 two-day workshops in towns on the island. The Cyprus International School of Management under the leadership of Agoras board member Yiannis Laouris won funding for this effort from the European Union and corporate sponsors.

The ultimate goal of this project was to strengthen the administration and leadership of local governance in Cyprus through the education and support of staff elected and not. The agreement is designed to diagnose needs for learning and development for local authorities. The physical object of the project included:

- Documentation and recommended enhancements of existing weaknesses in the areas of administration and learning;
- Developing an integrated plan for education and development initiatives; and
- Creation of a mechanism to promote project management learning to local governments after the completion of this project.

The methodology chosen for this project had three stages: (1) Conduct personal interviews with local leaders to identify learning and development needs for administration and leadership; (2) Conduct 10 two-day co-laboratories to determine the problems and needs existing in local organizations, tracking, prioritizing, and categorizing their root causes and deciding which of them can be overcome through learning activities; (3) Prepare reports on the Learning and Development needs of local governments, prioritizing those needs, and providing suggestions on how those needs can be met.

The methodology of Structured Dialogic Design<sup>SM</sup> (SDD) was selected as the most appropriate method for conducting the 10 two-day laboratories. The SDD method:

- Records all ideas from all participants
- Allows all participants to express their opinions
- Involves all stakeholders throughout the workshops
- Promotes understanding the culture existing in the municipalities and identifies possible barriers and drivers for change
- Enables understanding the broader needs and problems of municipalities and communities.

The workshops were conducted under the supervision of Dr. Aleco Christakis (Agoras founder) and Dr. Yiannis Laouris (Agoras board member).

The inaugural triggering question was: Which obstacles do you face in your daily work that might be solved? The organizers were able to carry out the ten workshops with around 250 participants. Each municipality identified about 100 obstacles, which underwent the SDD process and developed their own influence maps. All the obstacles they identified were later clustered into 11 categories: Training-Education, Party special interest interventions, Legal subjects, Economics, Regional cooperation-Decentralization, Vision strategy, Bureaucracy, Small communities, Recruitment, Infrastructure, and Obstacles to possession.

Experiments showed that participants change their minds regarding the voted relative importance of the various problems. This is in contrast with the problems judged most influential in the process of

constructing the influence maps. Only one of the ten barriers voted most important ended up among the 10 barriers that were judged to be root causes of governmental dysfunction. In other words, fastening upon the barriers voted as most important would have led to ineffective action; that is, it would have succumbed to the Erroneous Priorities effect.

The 10 obstacles that were found to be the most influential; that is, as root causes of local dysfunction, were the following:

1. Lack of vision and strategy from elected officials
2. Lack of a central coordinative body for training executives of local government
3. Lack of effective management because of party intertwinings
4. The legislative frame is not adequate given the requirements of current society
5. Recent changes of the legislative frame
6. Ignorance of legislation and regulations among elected officials and employees of local self-government
7. A lot of communities with a small number of residents
8. Stagnation in the modernization municipal institutional bodies
9. Entanglement of party expediency
10. The election of incapable officials.

The post-workshop comments of the participants were mostly positive. Most found the methodology impressive and innovative, and managed to keep undiminished interest from beginning to end. Almost all participants found the workshops to be constructive and useful for understanding the problems occurring in local government. Many also said they wish to adopt this approach in the own community/town councils and expressed interest in participating in the further stages of concrete work. Most participants considered the experience as very good and declared that they would want to organize other such laboratories focusing on other subjects.

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