

SOCIAL LEARNING LABORATORY FOR URBAN SUSTAINABILITY

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SUMMARY

This paper describes the experiences gained through the design and implementation of a learning laboratory (SLLS) aiming to create an interface among city officials and citizens on issues related with resource management, standards of living, municipal services and process improvement. SLLS allows integrated learning for cross-cultural teams on systems thinking, sustainable development principles and concepts, city processes and services.

Globalization and Sustainable Development

The North American Free Trade Agreement (NAFTA) is the main stream through which Mexico is becoming part of global flows of economic activity. After several years of being implemented, NAFTA's benefits on the overall Mexican society are the focus of political debate involving government, political parties, social organizations, citizens, academics and scholars.

On the optimistic side is the opinion that Mexico is gaining spaces in the global economy. The economy is blooming and years to come will spread its benefits beyond low-end jobs. Arguments are that global trade became the dynamic arm of the Mexican economy; it moved from 5% during the seventies to 22% in the late 1997 (1). As a consequence economy is growing, not only in quantitative terms but also transforming the input-out structure.

On the other hand, critics said that the social and environmental costs are an unjustifiable burden for the future. Investments are based on intensive use of environmental resource, offering scarce examples of knowledge based industries. That process is creating a short-term illusion that will nurture a long-range nightmare. Growth policies were made without any consideration on environment and natural resources particularly in Northern Mexico where cities are expanding against arid environments. Critics add that growth is accompanied by the intrusion of global criminal networks –drugs, prostitution- creating massive negative impacts on youth.

An immediate consequence is that NAFTA gave a strategically position to the northern Mexico; increasing the already existing competitive advantage of the northern cities reinforced migration from the less industrialized southern regions of Mexico. Configuring a “success to the successful” archetype.

Unsustainable Cities.

Growth is present but development seems to be far for northern cities that are facing deep deleterious process. Industrial capital and population flows are acting against any sustainable future. Social and natural capitals are suffering deep erosion. Spite of the constant rhetoric to embrace sustainable development pathways, economic growth is reinforcing an urban culture focused on short-term results and the emerging of a myriad of problems related with: Unmanageable streams coming from industrial and municipal wastes; Water resource depletion; Irregular land use and housing development; Traffic explosion and air pollution; Delinquency, drug and prostitution and Shrinking of city services. These “problematiques” are closely tied with the traditional forms for dealing with them.

City’s Management Under Siege

Saltillo is one of the northern Mexican cities suffering of such phenomena. Located 200 miles south of the US border. Its growth has been based on new assembling plants (maquiladoras) reinforced by an increasing integration of the automotive industry, that is moving to a more “just in time” production approaches attracting a vast array of peripheral suppliers. Non-linear growth of Saltillo’s economy and population made to sound as a blasphemy any argument to promote sustainable development and slowing growth in order to ameliorate the expected negative long term effects.

Several of the city process and services started to show the consequences of resource depletion and the crisis in the management and administration skills. Among the issues faced by city management that are critical in these times, following are relevant to be mentioned: Obsolescence of regulations; Vertical policy design and implementation; Low quality administrative process; Fragmentation of processes; Analytical and symptomatic approaches and reactive responses; Short term time horizons (no more than three years); Traditional leadership based upon political control; Obsolescence of administrative technologies; Participation, communication and trust at very low levels; Lack of indicators on city capitals, flows and processes.

This situation is shaping the need to reinvent city management process. Redesign must take in account principles of systems on transformation and change, particularly adaptation and coexistence has to be emphasized (2,3).

Education might be one of the most effective levelers. However traditional focus based upon individual skills and isolated learning process is becoming ineffective. New metaphors for social learning are needed that promote awareness, principles and social practices on sustainability.

The Need for Social Learning Spaces

Under the light of these previous considerations an experiment was started in 1999 with the support of Saltillo Major Office. Project included the design, creation and application of the Social Learning Laboratory for Saltillo (SLLS). Primary motivation emerges from the perceived need to improve quality of city's services. Other interest is to have a more interacting way to work with communities to generate a common vision on quality indicators and time frame.

At the practical level SLLS mission is to create a new way for collective learning on city issues, enhancing social skills and awareness on: Synchronicity between social dynamics and service dynamics; Communication and dialogue skills; Perception of time horizon; Negotiation and conflict management; Trust and team learning; Deployment of quality and city services indicators; Collective reflection on specific issues (water, traffic, sewage, etc.); Modeling and mapping of city and community issues.

The design of SLLS was based on previous experiences of workshops on sustainable development (4). SLLS integrates in a common ground: action learning, systems thinking, sustainable development concepts, city processes and system dynamics models.

SLLS process consists of a series of four workshops with a total of 40 hours and groups of city officials and local communities. The **first** workshop creates aim is to promote trust and improve dialogue skills, it is based on action learning initiatives; framing is focus on collaboration values. The **second** workshop objective is to improve negotiation and conflict management skills and to dialogue on diversity and feedback issues. The **third** workshop introduces concepts on systems thinking, the notions of time, process, structure and behavior over time; action learning initiatives, games and simulations are applied; experiences are framed on city services and community issues.

The **fourth** workshop is a two-day effort where city service process and community dynamical needs must be synchronized to create a long-term sustainability performance. Two learning platforms constitute the workshop: a game on city service process improvement and a simulation (based on a dynamic model build in IThink) of community dynamic and its process for development. At the end a final half a day workshop assembled the experiences includes the concepts of process, long term process and feedback.

Results and Beyond

Up to now one thousand people have participated in SLLS activities. Surveys performed on participants showed main areas of impact: an improvement on process understanding, an enhanced time horizon on dealing with conflict and better team and communication skills. Various actions are on the way for expanding the application of SLLS: a redesign of the inspection

function on city services and its use on collaborative design of community projects and critical issues of the city.

Bibliography

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4. Some of the concepts were based on a workshop on sustainable development designed by Prof. Dennis L. Meadows.