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PLANNING AND SUSTAINABILITY

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Curricula in Planning Schools in Latin America and Sustainability

Abstract

The foundations of planning education in most Latin American countries, (known as education in urbanism), was first taught at the schools of architecture as optional courses to the senior level for those interested in this field. The first Graduate Program in Urbanism in Latin America was created in 1949 at the Universidad de Buenos Aires, Argentina.

Mexico has had in Latin America a renowned tradition in planning education ever since planning educator Domingo Garcia Ramos pioneered the field with his book Urbanismo, a prospective of urban development in Mexico for the decades of the 60s and 70s.

In Venezuela in 1967, the Instituto de Urbanismo opened as a Research Center pertaining to the College of Architecture and Urbanism (FAU) at Universidad Central de Venezuela with focus on land use, transportation, as well as social and economic issues. Within the Institute's structure the first graduate program in urban planning in Venezuela was created in 1969.

In 1974 at Simon Bolivar University was created the first undergraduate program in urban planning. A year later, Universidad Autonoma Metropolitana (UAM) in Mexico City created the program Urban Planning and Design of Human Settlements. Since then seven more undergraduate programs have appeared in the region of about the 60 graduate programs in planning that exist in Latin America.

This paper analyzes the curricula of the three countries' five urban planning programs that have initiated the undergraduate planning programs' movement in Latin America as a response to the need to start planning education at an earlier stage (Bachelor's degree¹) where students are more sensitive and open minded to the understanding of the foundations in planning sciences.² It also analyzes to what extent sustainability is attained to these programs.

Key words: Planning, pedagogy, curricula, sustainability

¹ Latin American universities follow the French model of five-year educational training. This prepares the graduate to perform at a professional level, equivalent to that of a Master's degree in the United States.

² XXII Encuentro RNIU; *Congreso Latinoamericano sobre la Formación de Posgrado en el Análisis Territorial.* Septiembre 1999, Tijuana, México

Curricula in Planning Schools in Latin America and Sustainability

Introduction

The accelerated urban growth that Latin American countries have experienced in the last fifty years has not had the expected impact on the creation of planning schools to tackle the increasing problems that appear when high rates of population growth and migration are the common trend.

This is the case in most countries such as Argentina, Brazil, Colombia, Mexico and Venezuela - to cite the most distinctive - with an annual rate of urbanization bordering on 90% (CEPAL 1998).³ Although urban problems have been increasing in recent decades, planning education shows key differences among these countries.

Latin America scores one of the highest worlds' urbanization annual rate (bordering 90% according to CEPAL⁴), a rate that clearly determines the need for training programs and planning schools to tackle the issues associated with accelerated urban growth. The spread of planning education could make a difference to improve functionality to distress cities in Latin America if a body of well trained officials take positions whether at government agencies or in consulting firms specialized in planning.

Background

Although urban plans have been developed formally in several Latin American capital cities⁵ during the 30s, modern planning education in Latin America appeared after the Second World War as optional courses in architecture school programs

In 1949 at the Universidad de Buenos Aires, Argentina, there appeared the first graduate program in urbanism in Latin America, now called urban and regional planning. It was in the late 70s after the 1976 Vancouver Habitat Conference that graduate programs in urban planning began to take off in several Latin American countries. In 1975 Mexico and Venezuela pioneered the first undergraduate programs in urban planning, which by now have granted almost 1000 professional degrees altogether.

³ CEPAL, (1998). Ciudades Intermedias en América Latina y el Caribe: Propuesta para la Gestión Urbana". Ministero degli Affari Esteri. Italian Agency for Cooperation. Rome, Italy.

⁴ ČEPÁL, (1998). Ciudades Intermedias en América Latina y el Caribe: Propuesta para la Gestión Urbana". Ministero degli Affari Esteri. Italian Agency for Cooperation. Rome, Italy.

⁵ Almandoz, A., (1997). Urbanismo Europeo en Caracas. Equinoccio, Universidad Simon Bolivar. Caracas, Vla.

The Question

To answer the question, "Are there any universals in planning education in Latin America?" We need to know the general background that gave rise to the foundations of planning education. In this sense, it has to be said that the main influence on modern planning in Latin America has been "French urbanism," or the École Supérieure d'Urbanisme, which features the ideas of Le Corbusier. The influence of these ideas on the first general plans of Buenos Aires, Montevideo, Rio, Sao Paulo, and later on Caracas is clear evidence of this.

Urban and regional planning in Latin America is taught at the undergraduate level in leading universities. These were created in the late sixties (Universidad Autonoma Metropolitana and Universidad Simon Bolivar) as a response to a new model for universities in Mexico and Venezuela respectively.

Later more traditional universities joined this group in an effort to update their studies with the times and new emerging career fields. This is the case of Universidad Nacional Autonoma de Mexico, Benemerita Universidad Autonoma de Puebla, Universidad de Guadalajara and Universidad Autonoma del Estado de Mexico. Universidad Autonoma de Aguascalientes (Mexico) and Universidad Nacional de General Sarmiento in Argentina are among the youngest institutions in this group.

Why does this study address undergraduate programs?

On the one hand, we must bear in mind that Latin American universities follow the French model of five-year educational training. This prepares the graduate to perform at a professional level, equivalent to that of a Master's degree in the United States. Nevertheless, students may follow postgraduate courses with the intention to specialize in areas of their interest.

On the other hand, there is growing evidence among graduate planning schools that those students with a Bachelor's degree in urban or environmental planning sciences have a better understanding of the urban problems and are more sensitive to urban needs than those with a different background⁶

The following is the first attempt that analyzes the Curricula of Latin American planning institutions that are educating the planners for the 21st Century in this Region.

⁶ XXII Encuentro RNIU; Congreso Latinoamericano sobre la Formación de Posgrado en el Análisis Territorial. Septiembre 1999, Tijuana, México

Names of Institutions reviewed and year founded:

Universidad Autónoma Metropolitana, UAM. México City.	1975
Universidad Autónoma de Aguascalientes, UAA. México.	1980
Benemérita Universidad Autónoma de Puebla, BUAP. México.	1992
Universidad Nacional de General Sarmiento, UNGS. Argentina.	1998
Universidad Simon Bolivar, USB. Caracas, Venezuela.	1974

PLANNING EDUCATION IN MEXICO

Universidad Autónoma Metropolitana, UAM. Mexico City

Background and Degree Name

Mexico has had in Latin America a renowned tradition in planning education ever since planning educator Domingo Garcia Ramos pioneered the field with his book Urbanismo, a prospective of urban development in Mexico for the decades of the 60s and 70s.

Accordingly in 1975 Universidad Autonoma Metropolitana (UAM) in Mexico City started the first five-year training planning program in Mexican higher education.

The original degree name, up to 1998, was "Human Settlements Designer" (Diseñador de Asentamientos Humanos). In 1999 the degree name changed to the more generic "City and Regional Planner" since the denomination in Spanish "Planificador Territorial" covers both levels (urban & regional).

The educational aim of this program is to train future planners with an interdisciplinary vision to solve problems concerning community, political and economic issues in urban centers or regions. The program covers various topics such as demography, housing, transportation and utilities.

Student Enrollment and Degrees Granted

The 2000-2001 academic year enrollment was 261 students. The degrees granted since 1980 have been 542. Of these, 94 are City and Regional Planner (Planificador Territorial)

Faculty Composition

Fifteen full-time and five part-time. Of these, five of the full-time professors have doctoral degrees.

The five-year program in Urban Planning

- Structure

The program of this University is, together with USB's (Venezuela), a pioneer in urban planning education in Latin America (1975). It is organized into three main academic modules or academic stages for planning learning:

- 1) Foundations in planning learning
- 2) Human Settlements interdisciplinary learning
- 3) Planning the city and its regional setting

- Contents

1) Foundations in planning learning

This is an introductory first year dedicated to establishing the conceptual framework delivered to all new students in planning and related fields. The courses in this first year are concerned with planning and societal needs, the city in history and its relation with regional networks, the inter-disciplinary nature of planning studies and the interweaving between city and social development.

2) Human Settlements interdisciplinary learning

This module is concerned with the theory and practice of planning in the following environments:

- a) Urban space and the urbanization process
- b) Environment and its relation with urban development
- c) The production of the urban fabric: social dynamics and city management
- d) Housing and urban development
- e) Commercial activities within the city and land use marketing
- f) Mobility, land use and forecasting development growth

3) Planning the city and its regional setting

In this stage the student is confronted with real-life case studies on three levels:

- a) Community planning
- b) City Planning
- c) Regional Planning

Employment

After a student graduates from a five-year program in Latin America he is considered a professional capable of performing independent work. The UAM graduates

work mostly in the federal and state governments due to the fact that the school is located in Mexico City where most federal agencies are. There are also a great number of professionals who pursue postgraduate studies at the same University (UAM).

Lately, after having built a good reputation, graduates from UAM establish their own firms as consultants nationwide.

Universidad Autónoma de Aguascalientes, UAA

Background and Degree Name

The University Executive Board first approved the Universidad Autonoma de Aguascalientes, UAA (State University of Aguascalientes) five-year training planning program syllabus in 1980. The first urban planning degrees were granted in 1985.

The degree name is Licenciado en Urbanismo (certified urban planner). The aim of this program is to train planners who will deal with the management of urban and regional issues in order to enhance the urban quality of communities through envisioning creative policies of an interdisciplinary nature. The program includes urban structure analysis, morphology, community development and public policy.

Student Enrollment and Degrees Granted

In the 2000-2001 academic session, student enrollment has been 75. Degrees granted since 1985 number 120.

Faculty Composition

Seven full-time faculty hold Master's degrees, as well as eight part-time (one doctoral degree). Interesting is the fact that 65% of the faculty members have completed undergraduate and graduate studies in urban planning, while the other 35% have done so in architecture and the social sciences.

The five-year program in Urban Planning

- Structure

The academic structure of the UAA program in Urbanismo is set in three main areas:

- a) Theory
- b) Technology
- c) Urban laboratories and studios

- Contents

- a) Theory groups urban planning, environment, sociology, law, economic theory and foundational concepts.
- b) Technology features all those courses that serve as the tools used to study and analyze urban phenomena such as statistics, demography, accounting, photogrametry and GIS.
- c) Studios, case study seminars and computer labs are used to simulate real-world case studies that sometimes relate to faculty research and consulting. The focus of this school tends to the physical-design approach, with some concern for community development and city planning regulations.

Employment

Evaluating what graduate urbanistas can do to practice their careers is an important indicator of what they have been trained to do at school.

Aguascalientes is a small state compared with its neighbors. The capital city of the same name is the only city that counts (others are only small poorly developed towns). Therefore, most of the graduates stay in the city of Aguascalientes to take jobs within the city and state government frameworks (83%), while 12% work in neighboring states and 5 % abroad for postgraduate studies.

Benemerita Universidad Autonoma de Puebla, BUAP

Background and Degree Name

The urban planning program at Universidad de Puebla has focused on environmental issues and the design approach to solve urban problems.

The program denomination is *Licenciado en Diseño Urbano Ambiental* (certified Environmental Urban Designer). It was approved by the Academic Provost in 1992 and initiated in 1993. The first degrees granted were issued in 1998.

The training develops skills in urban processes including urban history, urban morphology, urban design, advocacy planning, and environmental planning. In this sense, Geographical Information Systems play a crucial role as the technique to deal with remote sensory images used for forecasting and thus better planning solutions.

A special area of concern at this school is dedicated to the interweaving of utilities and construction costs.

Student Enrollment and Degrees Granted

The 2000-2001 student enrollment has been 328; 42 degrees have been granted since 1998.

Faculty Composition

Seventeen full-time and nine part-time. Of these, only three full-time professors have doctoral degrees. Twelve have done postgraduate studies in different fields, mainly urban and environmental planning.

An important indicator of the school's orientation is the fact that most faculty have, as a first degree, architecture (28) and civil engineering (4).

The five-year program in Urban Planning

- Structure

- The emphasis of the urban planning program at BUAP is centered on environmental design.
- The course's structure of the Environmental Design program at BUAP is organized within the framework of the following fields of knowledge:
 - a) Theory and methods
 - b) Technology
 - c) Environmental Design Studios
 - d) Design Applications Laboratory

- Contents

- a) The section responsible for teaching theory involves the foundations of planning and design concepts. The methods area involves research foundations, multimedia techniques, planning techniques, ordinance surveys and regulations.
- b) Technology comprises courses related to quantitative methods such as statistics, urban cartography, remote sensing and urban programming. It also involves urban administration to address managerial issues for urban growth financing.
- c) The main framework for this career is based on several studios as part of environmental design studies, deriving from basic design training, multimedia techniques and complex urban design projects.

d) This section is dedicated to obligatory optional courses (from a set of ten) that give the student the opportunity (based upon courses available) to apply theoretical background knowledge to practical exercises in real-life problems. This is the lab where case studies may use GIS, multimedia techniques, discussion seminars or studios on specific problems.

In order to obtain diplomas, students must serve an internship, whether in a government agency or in a consulting firm. There they should exercise their training skills in planning. Failure can result in repeating the internship.

Employment

Graduates from Benemérita Universidad Autónoma de Puebla, BUAP go to jobs offered mostly by the state and local governments (60%). Universities (30 %) and the private sector (10%) account for the rest.

Professional Certification

In Mexico, the right to practice professionally is certified directly by the Department of Public Education (Secretaría de Educación Pública, SEP). Its Office of Professional Registration maintains records. Every graduate with a degree granted by a Mexican University can then practice the profession for which he/she earned a diploma throughout the country.

PLANNING EDUCATION IN ARGENTINA

Universidad Nacional de General Sarmiento, UNGS. Argentina

Background and Degree Name

Argentina was the first country to initiate postgraduate studies in urbanism in Latin America⁷ (1949) when the Institute of Urbanism was created at Universidad de Buenos Aires. Nowadays postgraduate studies in urban planning or related fields have proliferated throughout Argentina.

In 1993 Jose Luis Coraggio, a renowned social scientist in Latin America who has long worked in development issues in Mexico and several other countries in the hemisphere, joined the experts' group which had established the foundations for the

⁷ Randle, Patricio. (1977). OIKOS, Asociación para la Promoción de los Estudios Territoriales y Ambientales. Argentina

creation of Universidad Nacional de General Sarmiento in the Metropolitan area of Buenos Aires, Argentina.

In 1995, university activities were initiated. They followed the principles for a Center of studies dedicated to the needs for industrial development in conjunction with urban growth. This is the first university in Latin America (and most probably in the hemisphere) that was born as a university center for urban studies since the programs, research, and major fields careers offered are all related to urban issues (urban ecology, urban sociology, local government and urban planning).

In this sense, Universidad Nacional de General Sarmiento and its academic programs offer an important response to problems of community development. It also offers mediation techniques for the different social groups and interests contending in local governments while implementing plans for political feasibility, environmental sustainability and urban growth management.

All the above is supported by a strong commitment to research, community work and teaching. These are considered strategically related activities to serve people's needs, leading to national development.

The UNGS adopted an academic structure based upon Institutos or colleges, where academic programs find their home for teaching, and Centers for research and community work activities for the Northeastern part of the Metropolitan area (circa two million inhabitants) from which 84% of the students ranging in age from 18 to 40 come. One particularity at this University is that most students (70%) are between 20 and 30 years old, and more than 50% are women. The urban planning program at UNGS began in 1998.

Student Enrollment and Degrees Granted

Due to the fact that studies in urbanism are just beginning, there are currently only 27 students enrolled in urban planning. However, local government studies have 59 students, urban ecology, 53, and urban sociology, 63.

Overall enrollment in the academic year 2000-2001 at the Instituto del Conurbano (College for Urban Studies) was 202 students. The urban planning program at UNGS began activities in 1998 and so does not yet have graduate students.

Faculty Composition

There are 34 faculty members, of which seventeen have tenure. Eleven are full-time (1 professor, 3 associate professors, 2 lecturers and 5 readers) and six are part-time. The educational level of the faculty is as follows: 4 Doctors or PhDs, 9 with Master's degrees and 21 with undergraduate diplomas from different disciplines.

The primary disciplines that faculty hold are mostly architecture (18%), economy (15%), sociology (15%), political science (15%), biology or natural sciences (15%), anthropology (9%), geography (6%), one professor from psychology (3.4%), and one from literature (3.4%).

These percentages show a faculty composition between architecture, economy, sociology, political and natural sciences.

The five-year program in Urban Planning

The academic structure at UNGS is organized on two levels. The first level comprises the first three years of studies, defined as foundational knowledge, which lead to a diploma emphasizing the background for the major field that the student will further study. The following fields are offered at UNGS:

- Structure

- 1) Basic Sciences (Physics and Mathematics)
- 2) Humanities (History and Philosophy)
- 3) Social Sciences (Sociology and Economy)
- 4) Management (Administration and Mathematics)
- 5) Technology (Technology and Mathematics)

The second level comprises two years of professional studies after completion of the first level (three-year) courses. There are four majors offered for study:

- 1. Local Government
- 2. Urban Ecology
- 3. Urban Planning
- 4. Urban Sociology

- Contents

The urban planning program core areas include:

- a) Urban Geography
- b) Urban Ecology
- c) Growth Management, and
- d) Technology (Systems approach, Statistical methods, GIS)

The capabilities developed by urban planning training at UNGS are dealing with local government issues such as growth management, group negotiation and working with interdisciplinary teams.

Those graduated from UNGS should be able to analyze and evaluate city problems and produce alternative solutions to upgrade the quality of life. All of these responses should be made within a framework of financial feasibility to guarantee sustainable development over time.

Employment

Universidad Nacional de General Sarmiento, UNGS from Argentina will have its first-degree candidates in the year 2003.

Professional Certification

Not yet available

PLANNING EDUCATION IN VENEZUELA

Universidad Simon Bolivar (USB), Caracas

Background and Degree Name

Simon Bolivar University introduced the urban planning program at the undergraduate level in 1974, pioneering in this way the five-year training programs in Urban Planning in Latin America (first degrees granted in 1979).

Modern Urban Planning in Venezuela arose under the influence set by the French urbanism tradition, the most notorious expression of which was developed in 1939 with the "Monumental Plan for Caracas," better known by its author: Plan Rotival. Rotival was an alumnus of the Ecole Centrale in Paris and belongs to the generation of Le Corbusier. Moreover, he was a professor at Yale⁸ prior to 1930 and was hired by the firm of Henry Prost, who was the CEO of one of the most renowned French firms of the 1930s which were designing urban plans for several countries in northern Africa, the

⁸ Maurice Rotival (1892-1980). L'Architecture d'Aujourd'hui, 208 Paris: April 1980

Middle East and Latin America. They were in charge of the urban renewal of Caracas as well.

Nevertheless, in 1920 private developers started building the first socially oriented subdivisions in Caracas⁹. In 1928 there appeared the first Housing Act¹⁰. This created the first Housing Agency (called Banco Obrero), and this in turn was responsible for the first public housing developments in Venezuela.

As in most Latin American countries, education in urban planning (better known as education in urbanism), was first taught in the schools of architecture as optional courses at the higher levels for those interested in this field.

The first Center dedicated to the broader issues in national planning and development research in Venezuela, called Centro de Estudios para el Desarrollo, was founded in 1961 as an initiative from the academic vice-chancellor's office at Universidad Central de Venezuela (UCV). UCV later opened postgraduate studies for development sponsored by the United Nations' educational program. Six years later, in 1967, the Instituto de Urbanismo opened its doors as a Research Center pertaining to the College of Architecture at UCV (Universidad Central de Venezuela) with an orientation on specific urban problems at the local and city scale. This Institute created the first postgraduate program in urban planning in 1969.

In 1971 a new Research Center was created at Simon Bolivar University (a new center for higher education created in 1969), as a response to the country's development needs for a new generation of professionals. Professor Omer Lares (who also founded the Instituto de Urbanismo at UCV) headed this Research Center. Featuring a broader scope, the Institute for Urban and Regional Studies (Instituto de Estudios Regionales y Urbanos, IERU) was the place where the idea for a program on undergraduate studies in planning was generated.

The professional commissioned to develop the first program was an architect graduated from UCV who held a Master's degree in planning from the graduate school of design at Harvard. This man was Alberto Morales Tucker, who in 1979 graduated the first generation of urban planners (as a professional career) in Venezuela.

⁹ El Banco Obrero en Caracas, 1928-1945. INAVI, 1985

Student Enrollment and Degrees Granted

The 2000-2001 student enrollment was 19. Degrees granted since 1979 number 448 over a span of 21 years.

Faculty Composition

There are 18 full-time faculty and 11 part-time. Of the full-time faculty, nine hold Doctoral degrees and nine Master's degrees. Among the eleven part-time faculty, nine hold a Master's degree.

The five-year program in Urban Planning

The studies structure in urbanism at USB mandates a first year in common with architecture's syllabus. After the students successfully get done this first year of foundational knowledge, professional studies follow in the second level, comprising four more years in three core areas.

- Structure and contents

The second level comprises four years of professional studies after completion of first level courses. During these four years, students have the opportunity to be trained in three areas that have been defined as core areas for the professional in urban planning. These areas are:

- a) Planning theory, social and demographic aspects and local government. This area groups courses which explain the foundations of planning theory viewed from the historic and evolutionary concepts approach. It also includes the research foundations courses developed by the social sciences where the relation of society to planning is explained. Understanding of local government is explored in courses which draw on insights from public policy theory and public management practice.
- b) Land use and comprehensive planning. This area comprises most of the studio courses including environmental analysis, physical and local planning, community development, small town and city planning, transportation, GIS, and plan implementation.
- c) Growth management. This area includes courses in statistics, economy at city and regional scale, urban project evaluation, real estate, operational planning, utilities programming investment and housing project feasibility assessment.

¹⁰ Ley del Banco Obrero, Caracas: Gaceta Oficial, June 30, 1928

Graduates from USB receive professional certification and are qualified to work with interdisciplinary teams to develop land use plans, local government planning, growth management, and group negotiation. They should be able to evaluate urban projects meant to guarantee sustainable development over time.

Employment

Universidad Simon Bolivar has granted 448 degrees over a span of time covering 21 years. Of these graduates, 30% work in the public sector (federal or local government), 40% in the private sector (consulting firms) and 30% as freelance consultants. Here it is interesting to observe that most USB graduates are working in the private sector where they are highly regarded (mostly in firms working on large government projects), whether as freelancers or as consulting firm members.

Professional Certification

In Venezuela, university graduates desiring to practice their career must register their granted degree with the professional collegiate institution. In the case of urbanistas (the degree conferred upon urban planners in Venezuela), they register with the College of Engineers.

CONCLUSIONS

Planning Education and Sustainability in Latin America

Mexico and Venezuela pioneered undergraduate planning education in 1975. Nonetheless, some graduate programs began in the early 70's. Today almost every country in Latin America has urban planning programs at the graduate level ranging from urban planning, transportation, environmental planning, housing, urban design, and urban governance to public policy.

In Mexico there are six universities offering undergraduate urban planning training. Venezuela is the home of the oldest (25 years) undergraduate program in urban planning in Latin America. It is taught at the school of planning at Simon Bolivar University. Today the University offers two graduate programs, one in transportation and one in environmental planning.

Although Latin American social patterns seem different, some similarities can be

found based on the international influence of Western society now called globalization. The educational model at most planning schools is based on Western planning education standards¹¹.

Accordingly, planning education tends to be the indicated instrument to establish common ground for negotiation among the different social, economic and political forces that evolve within a city. An effort to deal with local problems in social, economic and environmental terms has led us to conclude that although these problems are very particular to Latin American settings, there remain some common features that can be considered *universals* from the theoretical point of view if adapted to the specificity of local trends.

The curricula in Planning Education in Latin America show a great concern for environmental issues. Most schools include environmental planning courses and awareness for the social factors that interweave the urban fabric. However the term *sustainability* has economic and political implications too. Planners can not build cities without the needed political feasibility to ensure a workable plan. Nor can a planner draw growth ideas into the city without knowing how much the plan may cost.

Latin America has become in the last decades a very volatile Region in social and economic terms. Countries that have a tradition as long standing democracies (Venezuela) are becoming a foothold to spread the influence of Cuba in South America. Others (Argentina and Mexico) whose economies ten years ago followed the principles of new liberalism and were the example of the free market are now in great trouble to achieve a decent rate of economy growth.

Central America countries after a long internal struggle have a rebirth from the ashes at the cost of national identity, since their economies are becoming a resemblance of a Puerto Rican like-State highly dependent from the U.S. Only Chile can be portrayed as a successful democracy with a healthy economy, but we all know the cost of it.

What I am trying to address in these conclusions is that planning education Latin America has the ingredients to create good planning practices, including sustainability. The main problem that Latin America faces is uncertainty. This uncertainty is highly related to sustainability and the big question is: How we can build sustainability in a highly volatile environment?

¹¹ In fact, all the pioneer faculty at these schools were educated at European or U.S. Schools of Planning.

The conclusion at this point is that planning schools should build the basic principles by which planning education would be a feasible instrument for development within an acceptable political framework that should lead to the next stage of development in Latin America. To make this possible, there must be a change in the political attitude towards the planning field where political feasibility and a sustainable economy are the key words to achieve these goals.

To conclude, it must be said that the main issues for planning education and sustainability in Latin America are defined by the following principles (which can be defined as *universals* in planning training), these are:

- a) Social Sensitivity, in order to address needs in a socially appropriate manner according to local problems.
- b) Economic Feasibility, always bearing in mind that funding resources are always very limited and that priorities should be made to achieve primary concerns when working in highly volatile economies.
- c) Environmental concern, as part of the balance that maintain appropriate standards of living conditions that preserve nature as an asset to secure quality in urban environs.
- d) Staying up to date on new technologies to solve problems fast and accurately.

Appropriateness, feasibility and adaptation to local realities are a *must* to achieve the four pillars for sustainability:

- a) Socially Accepted
- b) Politically Feasible
- c) Financially Sustainable
- d) Ecologically Balanced

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