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THE BORDERLINK PROGRAM: INTERNATIONAL ACADEMIC JOINT VENTURES

INTRODUCTION

The Borderlink Program is a binational, interdisciplinary, joint venture of the Universidad Autónoma de Baja California (UABC) in Tijuana, Mexico, and San Diego State University (SDSU) in San Diego, California. The goal of the Borderlink Program is to use language development and cultural awareness to equip students in both Mexico and the United States to become working professionals in a bicultural region. The pilot program lasted one month during the summer of 1994 and involved twenty-five students from the two institutions.

This article describes the methodology of the Borderlink Program in its pilot phase, beginning with a description of some of the unique characteristics of the San Diego-Tijuana region and the factors that motivated the creation of the program. These factors stem from the increasing interaction between people and businesses along the border. Linkages of family, friendship, commerce, and the environment, are all growing in importance, while institutional programs aimed at educating professionals to work in a bicultural region are lagging behind in their development.

Several areas need to be considered. First, the factors that created a need for the Borderlink Program are outlined. These factors are related to the missions of the local, comprehensive, regional universities on both sides of the border. The growing interdependence of Tijuana and San Diego presents unique opportunities and challenges for local universities as they attempt to play a significant role in the development of the region's labor force skills. After a discussion of the university's role, the goals and objectives of the Borderlink Program are reviewed, followed by

a discussion of the nuts and bolts of the day-to-day program format. The final part of the article examines the general requirements for a successful program along with several specific administrative issues.

Since the pilot program during the summer of 1994 was directed by an economist at SDSU, the content of the program was regional economic development. The methodology, however, is sufficiently flexible to use any topic of regional interest as its core subject, thereby taking advantage of the regional interests of faculty and students from almost any academic discipline. Future Borderlink Programs could focus on any number of areas: criminal justice, public health, fine arts and drama, ecology, urban planning, public administration, and primary education, to name a few.

THE GROWING INTERDEPENDENCE OF SAN DIEGO AND TIJUANA

The San Diego-Tijuana metropolis is the largest of the "twin-city" urban areas along the US-Mexico border, with a combined 1990 population of well over three million persons.¹ Partly in response to the implementation of the North American Free Trade Agreement (NAFTA), and partly as a result of the natural evolution of the San Diego-Tijuana region, social and economic integration has gained momentum over the last few years and appears to be moving inexorably forward in spite of numerous political, social, and technical barriers.

Indicators of social and economic integration unambiguously demonstrate that the region is growing in such a way as to diminish the importance of the international boundary that runs through its center. Total exports that originate from San Diego increased by 168.4 percent in nominal terms between 1987 and 1993. In addition, Mexico has become San Diego's most important market, taking 42.4 percent of exports in 1992. Perhaps as much as one-half of gross exports to Mexico re-enter the US after transformation in the *maquiladora* export processing zone just across the border in Tijuana (Greater San Diego Chamber of Commerce).²

¹According to the 1990 US and Mexican censuses, the combined metropolitan areas had 3,245,000 persons (Weeks).

²"Maquiladora" is the name given to manufacturing plants in Mexico (usually but not always along the border) that import raw materials or semifinished goods for processing and re-export. Mexico levies no tariffs on the plants' imports as long as they re-export and the US tariffs only the share of value added that was produced in Mexico. The special tax treatment of *maquiladoras* originated in the 1960s under Mexico's Border Industrialization Program that was designed to reduce unemployment and stimulate manufacturing in Mexico's border region. Under NAFTA the special tax treatment will be phased out.

The growth of the *maquiladora* sector is a second major indicator of regional interdependence. Tijuana and San Diego have enormous asymmetries in their levels of income and economic development; although this presents a number of challenges, it has also produced important commercial advantages. For example, the combination of San Diego's plentiful supply of scientific and technical skills together with Tijuana's abundance of inexpensive unskilled and semi-skilled labor has proven attractive to both US and East Asian investment. The region has become one of the largest concentrations of television manufacturing in the world, largely through investments by Japanese and Korean firms. In addition to television manufacturing, there are a number of other manufacturing sectors where US technology and infrastructure, combined with unskilled Mexican labor, and managerial expertise from both sides of the border can be coordinated to create competitive advantages.

A third and perhaps most striking indicator of regional integration is the number of border crossings between San Diego and Tijuana. Each month, between five and six million crossings are made from Mexico to the US through San Diego. An estimated ninety-six percent of these crossings are made by frequent (4–19 times per month) and very frequent (20+ crossings per month) crossers, most of whom are residents of the greater San Diego-Tijuana region. These crossers spend an estimated \$2.8 billion per year in San Diego, and cite family and social visits as the most common reason for their trips (*San Diego Dialogue*).

In the area of public administration, there is a growing acceptance of the need for the two cities to work together. The most visible symbol of this recognition is the recent signing of a "Letter of Agreement" between the mayors' offices.³ While the accord has no official standing (and violates diplomatic protocol between two sovereign nations) it symbolizes a

³The letter was prompted by the local debate over the NAFTA agreement and concerns over the local economic impact of defense cutbacks. In 1990, the city of San Diego's Economic Development Task Force proposed a new course for the region that would seek to develop international trade and trade related business services, and create greater openness towards Mexico for the overall benefit of the region. This initiative began informally as a series of meetings between San Diego and Tijuana officials, but when the local government of Tijuana completely turned over after the 1992 elections, officials on both sides realized that it was necessary to develop a more permanent mechanism for creating binational cooperation. The agreement was signed on April 14, 1993, by the mayors of Tijuana and San Diego. It creates an eight person Joint Steering Committee and Joint Working Groups. The cities agreed to cooperate in the following areas: 1) municipal and regional planning; 2) economic development; 3) police services; 4) fire services; 5) water and sewage systems; 6) libraries; 7) parks and recreation; 8) technology transfers; 9) waste disposal and recycling; 10) environmental protection; and 11) emergency management. The extent of cooperation is not specified.

mutual recognition by the city governments of shared regional problems and represents an official municipal declaration by both cities of the need to cooperate.

These indicators of regional interdependence are only a few of those that could be mentioned. Other significant areas of cross-border activity include environmental planning, tourism promotion, transportation planning, sports leagues, the arts, and numerous civic groups. Nevertheless, in spite of these cross-border linkages, the recent passage of Proposition 187 by the California electorate illustrates the resistance and fears that increased economic and social integration engenders.⁴ Proposition 187, which passed overwhelmingly in San Diego, was widely viewed as anti-immigrant in general, and anti-Mexican in particular. Although it was condemned by the business community on both sides of the border, its passage reflects the mistrust and uneasiness that commonly develops whenever a society undergoes deep and permanent changes such as are occurring in San Diego. The asymmetry in levels of economic development and the lack of a shared language increase the scope for mistrust and misunderstanding. Few Californians, for example, are aware of the existence of Mexico's middle class, and probably a tiny percentage of San Diegans have driven through Tijuana's middle-class neighborhoods. Although the border region of Mexico is generally more prosperous than the interior, middle class tourists from the US are often overwhelmed by the highly visible poverty that they encounter when they cross the border for the first time.

THE ROLE OF UNIVERSITIES IN THE SAN DIEGO-TIJUANA REGION

Each of these areas of growing interdependence require language skills, cultural sensitivity, and specific, detailed information about the structure of decision making and the location of information on both sides of the border. Universities traditionally have done a good job at teaching languages, a fair job at developing cultural awareness, and a poor job at helping students locate specific information and determine the mechanics of policy decisions made outside their own country. All three of these tasks have taken on a particular urgency in San Diego and Tijuana, requir-

⁴Proposition 187 was passed by popular referendum in the fall of 1994. Its intent is to deny all social services to illegal immigrants, including education for children who entered the US illegally with their parents. A court injunction prohibits its enforcement and most constitutional scholars have argued that it violates both the state and federal constitutions. Major components of the initiative have already been thrown out by the courts and it seems unlikely that any part of it will ever become law.

ing a greater involvement by the region's colleges and universities. Since local institutions produce a significant share of the region's professional labor force, the future prosperity of San Diego-Tijuana is closely linked to the ability of its universities and colleges to produce an adequate number of graduates who understand the region in its binational context. New skills in demand include bilingual language ability, knowledge of the political-institutional structures on both sides of the border, familiarity with information sources, and an understanding of decision-making styles in both Mexico and the US.

A second role for the university is to produce information. In economic terms, information often is not capable of being appropriated by private firms. As a consequence, there are solid reasons why it is underproduced.⁵ Markets, permit processes, infrastructure, tax systems, federalisms, and business-government relationships, to name just a few, vary enormously between the US and Mexico. Although this information is public, it is not free; it costs significantly in time and effort to acquire it. Consequently, there is an important role for universities (and public authorities) to function as gatherers and distributors of information through the training they provide and the information they generate.

While the need for a bicultural labor force is immediate, universities are inevitably slow to respond. By nature they are large, bureaucratic institutions that ignore sudden market changes. Universities require significant periods of time to officially recognize new needs and to begin to adjust their curriculum and programmatic offerings to meet those needs. Funds must be reallocated, curriculum choices made, instructors found or trained, and programs approved. While significant changes are underway in the region's institutions of higher learning, special programs administered in an entrepreneurial fashion can move much more quickly to fill the void in the bicultural training of professionals.

⁵In economic terms, the gathering of information often involves positive externalities—the situation where the benefits of an activity accrue in part to third parties. It is well known in standard economic theory that goods (information) whose production generates positive externalities will be undersupplied relative to the optimum level.

THE GOALS AND OBJECTIVES OF THE BORDERLINK PROGRAM

The primary goal of the Borderlink Program is to begin to fill the gap in the training of a bilingual and bicultural professional labor force. In many respects, one could say that it is an explicit effort to expand the normal functions of a comprehensive, regional university to serve a more broadly defined region—one that is international and that speaks two languages. As mentioned previously, it began as a pilot program for one month of intensive learning during the summer of 1994, and is a joint venture between the Universidad Autónoma de Baja California (UABC) and San Diego State University (SDSU). Given that both institutions are large (15,000 and 25,000 respectively), public universities with mandates to serve the needs of their states—Baja California in Mexico, and California in the US—the training of a bicultural labor force is consistent with the mission of each university.

The short duration of the program lent itself to a focus on the mechanics of research and information gathering in a binational region rather than the mastery of specific content. In other words, it was process-oriented rather than strictly content oriented. To be effective, however, process oriented learning requires a specific content to act upon; partly for this reason, students were grouped into teams and each team was given a general subject area on which to conduct research and write a report.

If the goal of the Borderlink Program was to begin a general process of enabling students to function professionally in a binational setting, the objectives were much more specific. The theme of the pilot program was regional economic integration and development. The choice of the theme stemmed from the project director's expertise and interest, but the strength of the methodology is such that under a different person's direction, virtually any topic worthy of academic investigation could be substituted. This leaves the door open to the future involvement of faculty in the arts, sciences, business, education, administration, and other areas.

The immediate objective of the Borderlink Program was to produce a handbook of regional economic issues. Specifically, the pilot program sought to create a single document that would describe economic and business conditions and that would explain the most important issues affecting the region. The handbook was designed to present issues, to explain whether they were of importance to both cities or to only one, and to create a bibliography of source materials drawn from local agencies such as the chambers of commerce, city governments, and transportation

agencies. By bringing together into one place a discussion of most, if not all, of the issues confronting the regional economy's development, and by providing a guide to the location of additional information, Borderlink also served the needs of the region to know more about itself.

Pedagogically, the specific task of creating a handbook that could serve as a guide to the more pressing economic issues of the region gave each team of students a clear and well defined task. This is important since it was the link that brought US and Mexican students into contact with each other and that served as the basis for cooperation and mutuality in their interaction.

Furthermore, the lack of a handbook or other short summary of regional issues gave meaning to the student's efforts. Not only did they learn about the region in a new way, but they also participated in the production of a potentially useful regional resource. The process of learning about regional issues in San Diego-Tijuana is time consuming and complicated by the presence of the international boundary. There is no way to determine *a priori* which issues are solely of importance to one side, or which overlap. Furthermore, libraries do not catalog many of the relevant documents since they mostly have very short periods of usefulness. In short, there is no quick way to study the issues, nor to determine which issues were shared and which were not.

THE FORMAT OF THE BORDERLINK PROGRAM

The goal of equipping students to conduct research in a binational context is problematic because it requires that they have both language skills and general background information about both cultures. Mexican students usually lack basic background information about the US constitution and federal-state relations, and know less about arcane features of the structure of local decision making. Similarly, unless an American student is majoring in Latin American studies, the chances are slim that he or she knows many basic facts about Mexico. The omission of these basic building blocks of cultural understanding makes it much harder to cross the border and to find needed information, even if one formally knows the language.

The format of the Borderlink Program was designed to compensate for the lack of a shared cultural experience while maximizing the opportunity to hear and speak a foreign language. The first and most critical element was to require the students to form teams of three to five students. Stu-

dents were permitted to select their team, but they were limited by two requirements: 1) each team had to have at least one person from each university, and 2) each team needed one person who was fluent in both English and Spanish. No formal language assessment exams were given, and the students with bilingual fluency were self selected. The limitations on university affiliation required at least one Mexican and one US citizen to be on each team. This insured that each team was equipped with the cultural understanding of both countries, even if each individual was not.

The second element of the program was a series of morning briefings with working professionals. These occurred almost daily for the month of the program, and lasted from two to three hours. In that time, speakers were asked to present a program in the language of their choice. As a matter of course, the Mexicans preferred Spanish and the Americans preferred English; as a result, about half of the programs were in each language. In every presentation, the invited guest was asked to describe the purpose of the organization he or she represented and the primary issues he or she faced. Each one also provided the names of other agencies active in the same area, and sources of information. Each presentation was followed by an informal question and answer period, which was quite successful. Some of the meetings took place in San Diego, the rest in Tijuana. In several cases, in order to accommodate the presenters and to expose students to a wider variety of environments, we met at the office or meeting room where the presenter worked. This enabled some organizations to provide two or more persons who represented several different areas of expertise.

The third element of the program took place in the afternoon when students worked in teams on their research. Each team was charged with preparing a final written report on a specific issue of relevance to the regional economy. The themes were selected by the project director to represent a convenient categorization of regional activities and to correspond to each of the chapters of the final report, which became the handbook on regional economic issues. The table of contents from the final report is shown in Table 1 at the end of this article; it serves to indicate the scope of the handbook. Themes were chosen for their importance to the local economic base (tourism, foreign trade, and manufacturing), the issues facing the region (the environment, transportation, water quality and deliv-

ery, waste disposal, and human resources) and for their ability to provide general background information (demography and political systems).⁶

In order to make the final report readable and to insure consistency among the various chapters, each team was given a format for their chapter(s). It served both as a guide to the kind of information that they gathered, and to its presentation in the final report. The purpose was to insure a common structure to each of the chapters and to increase readability. The common format includes information on the significant issues in each particular area, a discussion of transborder impacts, current actions to address the issues, and generalizations about any policy options. Where appropriate, students were asked to supply quantitative estimates, such as the size of the labor force or the percentage of the labor force employed in manufacturing. And finally, they were required to supply a bibliography of source materials that focused on, but was not limited to, materials not readily available in the region's city, county, and university libraries.

The final drafts of the team reports were in English, although significant parts of the earlier drafts were in Spanish. Each team worked on its own to write an English version of their final draft. In retrospect, this was the most painful part of the experience for the students, but perhaps also the most valuable.

A final (English language) presentation of the team reports was made before the Greater San Diego Chamber of Commerce, where Mexican and US students were able to serve as impartial commentators on a number of very politically contentious issues.

REQUIREMENTS FOR A SUCCESSFUL PROGRAM

Two elements were absolutely critical to the success of the program. The first, and perhaps most essential element was a prior working relationship between the Universidad Autónoma de Baja California and San Diego State University. Without prior successes in joint projects, it would have been much more difficult to convince people in both institutions of the value of the project, and that they should provide space, transportation, and community contacts. At several points, administrative stumbling blocks were overcome through personal contacts that had been established through previous interaction. Equally important was the will-

⁶The entire handbook is available electronically or in hardcopy. The electronic version is located on the world wide web at "<http://www.sdsu.edu/ciber/borderlink-1994.html>". Hardcopies can be obtained through the Institute for the Regional Study of the Californians at San Diego State University, (619) 594-5423.

ingness of key people in both institutions to try something new that was outside the normal academic experience.

The second critical element was a high level of student commitment. Crossing at the world's busiest border is exhausting. Lines are long and one can wait from twenty minutes to over an hour. Because San Diego-Tijuana is essentially a desert environment, hot summer days intensify the exhaust fumes of vehicles waiting to cross. Furthermore, crossing the border in either direction presents significant psychological barriers due to differences in language, social customs, and standards of living. In the end, the determination of students to learn about economic and business relations on the "other side," and to maintain their efforts to improve their spoken Spanish (or spoken English) was what kept the program going.

The Borderlink Program was intentionally interdisciplinary and included both advanced undergraduates and graduate level students. The reason for not limiting the program to majors in one academic field is that we sought to duplicate as closely as possible the conditions students will encounter in the labor market. Students were selected through an application process that prioritized them on the basis of academic excellence and language skills within the constraint of balancing the representation of disciplines. All students were expected to have an intermediate level knowledge (three semesters) of Spanish or English. Two US students spoke no Spanish. One was a German exchange student and the other was a recent immigrant from Vietnam. They were admitted to the program due to their overall academic excellence and the fact that each spoke several languages in addition to English. In general, the program was bilingual, since both US and Mexican students listened to many hours of presentations in their second language. In addition, a very high degree of cooperation between team members was necessary in order to produce each chapter of the handbook. Even though the final drafts were in English, the need to translate the information gathered in Tijuana necessitated a continuous interaction between US and Mexican students.

Production of a bilingual report was impossible in the short space of the allotted four weeks. Furthermore, a bilingual report would require either a project director who was completely fluent in both languages, or financial resources to pay someone to translate. The lack of a bilingual report is a shortcoming of the language development component of the program and is a serious obstacle to the full utilization of the information

gathered by the teams over the course of their study. Nevertheless, the program goal in the area of language development is not to qualify translators, but to increase the language proficiency of young professionals entering the labor market on each side of the border. The funding of a bilingual report is exactly the type of activity that would benefit the region, but one that would probably not interest a commercial enterprise. Consequently, it will most likely require backing from either an independent foundation or a university.

CONCLUSION

One of the most useful features of the methodology used by the Borderlink Program is that it can serve as a model for studying other features of the binational region (or even within the context of a single-nation region) and can be tailored to meet the specific content needs of students in a variety of majors. For example, potential program themes include the arts, medicine, criminal justice, public administration, primary education, and ecology.

The human landscape of the San Diego-Tijuana region is dotted with areas that are akin to once blank areas on maps—unknown and unexplored by people from the “other side” but comfortable and familiar to the natives. The unknown must be explored. In our case, the flow of information between the two metropolitan areas must increase for basically two reasons. First, San Diego-Tijuana is a relatively young multicultural region. Many of the residents on both sides are recent immigrants who have brought numerous preconceptions and little real information about the social and economic systems across the border. Many residents lack historical roots in the region, which undermines tendencies towards cultural integration and increases misunderstanding, mistrust, and xenophobia.

The lack of cultural awareness is also a source of missed commercial opportunities. The small and medium size enterprises that predominate in the region cannot afford to generate the needed information about market opportunities and joint ventures across the border. This is an area where “strategic interventions” by public agencies can make a difference in the region’s future prosperity while at the same time avoid the negative effects on economic efficiency that often occur when public agencies intervene in the economy.

As long as comprehensive, undergraduate, regional universities express a commitment to the region, their mission must expand to include the training of university graduates to think and act in ways that reflect bicultural realities of the border region. Borderlink is a small but effective step in this direction.

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TABLE 1
Table of Contents for the final *Borderlink 1994* report

1	Introduction to Borderlink 1994	1
	Dr. James Gerber, Project Director	
2	Economic and Demographic Profile	21
	James Clifford (SDSU), Rosalia López (UABC), Augusto César Ponce Pelayo (UABC), Hans Schroeder (SDSU), and David Silva Pimental (UABC)	
3	Foreign Trade	29
	Héctor Cisneros (UABC), Tim Ruth (SDSU), and Mariana Salazar (UABC)	
4	Political Institutions	36
	Mabel Lung Jimenez (UABC), Ricardo Martínez Ornelas (UABC), Uli Meyer (SDSU), Luis Peña (UABC), and Jeff Sheldon (SDSU)	
5	Transportation Systems	49
	Andrea Peinado (SDSU), Hon To (SDSU), and Ben Omar Trejo Oltra(UABC)	
6	Water, Waste, and Power	70
	Andrea Peinado (SDSU), Hon To (SDSU), and Ben Omar Trejo Oltra (UABC)	
7	Tourism	85
	James Clifford (SDSU), Rosalia López (UABC), Augusto César Ponce Pelayo (UABC), Hans Schroeder (SDSU), and David Silva Pimental (UABC)	
8	Human Resources	98
	Maria del Carmen Alcala (UABC), Annelies Carlos (SDSU), Angélica García (SDSU), and Javier Modelevsky (UABC)	
9	Manufacturing	118
	Héctor Cisneros (UABC), Tim Ruth (SDSU), and Mariana Salazar (UABC)	
10	Environmental Issues	137
	Mabel Lung Jimenez (UABC), Ricardo Martínez Ornelas (UABC), Uli Meyer (SDSU), Luis Peña (UABC), and Jeff Sheldon (SDSU)	