

Education in a Global Age

An Inter-California Strategy for the Tijuana-San Diego Region

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ABSTRACT

This article lays out a blueprint for an Inter-California Strategy that would link the San Diego and Tijuana areas as one regional force. It attempts to conceptualize two distinct and often disharmonious areas as one, painting with broad strokes the uneven economic and educational conditions on the two sides of the border. It discusses past binational collaboration on education and sketches the possibilities for future collaboration, offering timely recommendations to bring it about and predictions for what it could achieve. In calling for an inter-California region, the article also argues for a global identity and, specifically, for an education that is relevant to the new economic, technical, and scientific advances that are increasingly illuminating a new global society.

Keywords: 1. education, 2. binationalism, 3. multiculturalism, 4. U.S.-Mexico collaboration, 5. globalization.

*Educación en una era global: una estrategia Inter-California para
la región de Tijuana-San Diego*

RESUMEN

Este artículo presenta un bosquejo para una estrategia Inter-California que enlazaría las áreas de San Diego y Tijuana como una sola fuerza regional. Esto intenta conceptualizar dos distintas y frecuentemente contradictorias áreas como una sola, haciendo una aproximación *grosso modo* de las desiguales condiciones económicas y educativas en ambos lados de la frontera. Se discute la colaboración binacional en educación, del pasado y se plantean las posibilidades para el futuro de dicha colaboración, ofreciendo recomendaciones y predicciones de las metas que podrían alcanzarse. Llamando a la región inter-California, el artículo también argumenta por una identidad global, y específicamente, por una educación que es relevante para la nueva economía, así como los avances científicos y tecnológicos que están iluminando cada vez más una nueva sociedad global.

Palabras clave: 1. educación, 2. binacionalismo, 3. multiculturalismo, 4. colaboración Estados Unidos-México, 5. globalización.

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INTRODUCTION

The social and structural changes ushered in by globalization and the accompanying technological advances signal an urgent need to reexamine the very nature of education, its practices, goals, and content. As global flows reconfigure notions of space, time, and culture, the educational system—the public institution charged with preparing citizens for their role in society—must refocus its curricular offerings and instruction to accommodate the realities of this new global age. Not only must education change profoundly, it must do so instantaneously—in much the same span of time that it took the Internet to capture 25% of the market, a short seven years (Roberts, 2000). Our changing times call for innovation, new competencies, and new identities. Given the right choices in social investments, this impending reorganization brings with it a broad spectrum of possibilities for greater integration of the market, human resources, and civic engagement. It is generally accepted that investment in basic education and other aspects of human capital protects the labor force from recessions and shifts in international markets (Nash, 1999).

It is also well established that effective citizenship in the twenty-first century will be synonymous with the ability to function within many distinct cultures, speak several languages, and be proficient in computer and telecommunication technology (Cogan and Derricott, 1988; Cummins and Sayers, 1995). By necessity, competent individuals will transact and identify with both local and global communities. They will be flexible thinkers, work well in teams, and be highly educated. Access to the existing and ever emergent global structures will be available primarily to those who are skilled in advanced services, such as research and development, engineering, law, and finance. Knowledge workers, whom Reich (1992) calls symbolic analysts—those able and willing to continue learning and to receive retraining—are expected to be the most productive and dynamic segments of labor in the new age.¹ However, a global age will demand more than the mental and functional dexterity required by the job market. It will require an ardent

¹I extend Reich's meaning of symbolic analyst to include others who are not necessarily of the corporate class but who welcome and conceive of novel ideas for new and old problems. Torres (1998) predicts that this group will be one of the most dynamic in the global labor force.

commitment to civic engagement, according to an 18-month study involving 182 policy scholars led by John Cogan and Ray Derricott (1998). Effective citizenship must also encompass, if not be defined by, traits of cooperativeness, responsibility, tolerance, and sensitivity, and a willingness and ability to act politically, critically, systemically, and nonviolently.

Given the recent mobilization by the State of California legislature on the pressing needs of the educational system, there is no better time for rethinking education for a global age. This article lays out a blueprint for action by addressing the question, “What could be a truly inter-California strategy for education in the San Diego and Tijuana region?” To conceptualize two distinct and often disharmonious areas as one region and design a corresponding binational educational project, however, is a daunting undertaking. This is especially difficult given the uneven quality of information available to construct an educational profile of each partner. Also, educational research on the border is still in its nascent stage, and scholars on both sides do not readily share their work with colleagues in the other country.² An extensive literature search for information on education and the border produced a scant collection of articles, all from the U.S. perspective. The focus falls primarily on economic development, immigration, and environmental issues. Although these issues relate to planning for an inter-California strategy, the lack of literature on education also points to fertile ground for potential research and practice.

With these caveats in mind, I will first discuss what we currently know of education in the Tijuana-San Diego region. I will then delineate the types of collaborative projects that are already in place, presenting examples of ongoing strategies that demonstrate great promise for educating individuals to engage globalization in the inter-California area of the Tijuana-San Diego region. Each strategy includes recommendations for how to extend these efforts into a binational collaborative context. These recommendations are grounded in over a decade of work developing university-community partnerships that address issues of access to, and involvement in, educational resources and institutional support, and they are intended to guide educators, researchers, and policy makers toward constructing and implementing a shared vision of binationalism and regionalism (Stanton-Salazar *et al.*, 2000; Vásquez, in press).

²For example, the author was unaware of the work of Leonel Corona, which is widely recognized among Mexican colleagues (see Corona, 2001).

EDUCATION IN THE TIJUANA-SAN DIEGO REGION

San Diego and Tijuana stand in a path of a continuous flow of human and material resources, which has existed for centuries if not millennia. Tens of thousands of people cross daily from Tijuana to work in the United States. During the 1990s, both cities experienced unprecedented economic booms that have heightened these flows and, more dramatically, heightened the interdependence between the two cities. Both have also experienced tremendous population movements into, and within, their respective metropolitan areas, causing a heavy burden on schools. These parallel flows could easily be misinterpreted as promoting prosperity equally on each side of the border. However, in reality, they are producing very different effects. The boom is uneven, the resources disproportionate, and the prospects for educational equity one of the biggest challenges. For example, the Tijuana side of the partnership has developed mainly in the manufacturing arena, and San Diego has triumphed in the generation of knowledge, distinctions that have serious implications for their respective educational systems and any plan for binational collaboration (Erie and Nathanson, 2000). In spite of this imbalance, many foresee their union as a precondition for making the area an economic powerhouse and many have already begun to chart the course toward an inter-California region (Puente, 1989).

Administrators and government officials from both sides of the border have begun to lay the foundation for an educational program that envisions binationalism, with its attendant bilingualism and biliteracy. At a recent binational conference on education, for example, Secretary of Education for the State of Baja California Lorenzo Gómez-Morin called language, “the only border between Tijuana and San Diego with regard to cultural integration” (SANDAG, 1998:2). He was echoing San Diego Superintendent of Schools Alan Bersin's concern over the need for “an educated population with bilingual capacity” to meet the impending challenges of a global economy. Thinking globally and acting locally, Bersin spearheaded a plan to implement biliteracy across the district that has spurred quite a bit of debate and even some constructive collaboration from minority interest groups.³ However, interest-

³On March 14, 2000, the San Diego County Latino Coalition of Education issued a Master Plan for Latino Student Success in K-12 that augmented the “Blueprint for Student Success in a Standards-Based System: Supporting Student Achievement in an Integrated Learning Environment” (available at

ingly, the debate has ignored the issues of culture and biculturalism, the flip side of language and bilingualism.

Tijuana

Aside from Ciudad Juárez across from El Paso, Texas, Tijuana is the busiest and fastest growing border city along the 2 000-mile border separating the United States and Mexico. "It is where Latin America begins or ends" (Golden, 1996), and, certainly, it is one of the largest international border cities in Latin America. The seasoned visitor to Tijuana invariably notes its unique character: "It is not really Mexico or the U.S., rather it is a masterful combination of both. Its residents favor the title of 'Tijuanense,' an identity that embraces a diversity of mexicano subcultures, from metropolitan artisans to Mixtec migrants" (Arreola, 1996). Its population is relatively young and predominantly middle class (O'Connor, 1997). Like many cities entering the global economy, Tijuana still has a foot in the past, with the accompanying social inequalities. It suffers from what Carlos Franco Pedraza, superintendent of Tijuana city schools, calls *la complejidad de Tijuana* (Tijuana's ambivalence).

The growth of the city and, consequently, its schools is *desbordante* (overflowing), according to Franco. In the past five years, the school-age population grew at a 4.5% percent annual rate, increasing to 7% in 2000 (Carlos Franco Pedraza, personal communication, July 17, 2000). To meet the demands of this population explosion, the school district for the City of Tijuana builds 80 to 100 classrooms, amounting to 18 to 25 schools per year. The schools serve 45% of all students in the state of Baja California. Education accounts for 64% of the state budget, one of the largest allocations in Mexico. However, according to Franco, 95% covers salaries, and only 2% goes to maintenance and 3% to operations. This leaves little for financing innovation, computer and telecommunication technology, or binational exchanges.

Like many of the large urban centers in Mexico, Tijuana has a relatively high level of academic attainment, literacy rates, and educational offerings

<http://www.sdcs.k12.ca.us/comm/current_issues/blueprint/table_of_contents.html>). On October 14, however, the Coalition issued a vote of no confidence concerning the implementation of the Blueprint that echoed the coalition's concern over Superintendent Alan Bersin's lack of adequate implementation of his highly touted biliteracy plan (see <<http://www.pipeline.com/~rgibson/SDCScrumbling.html>>).

(Simmons *et al.*, 1997). In cities with over one million inhabitants, literacy rates for youth between the 15 and 19 years of age was 96% in the 1990 census. These urban centers give the public greater opportunities for professional development and specialized training in institutions of higher education and technical schools, and Tijuana appears to be at the high end in terms of what it offers. For example, the average educational level in Baja California is 8.7 grades of schooling, compared to the national average of 7.7 grades (Carlos Franco Pedraza, personal communication, July 17, 2000). Literacy rates in Baja California are much higher than the national average (for 1996, 96% compared to 89.3%; 1998, 96.1% compared to 89.7%; and 2000, 96.2% compared to 90%).

Of Tijuana's 29 495 preschool children, 7 177 attend 130 private preschools, and the other 22 038 have access to 186 public preschools; both are practically nonexistent in rural communities. According to Franco Pedraza, 69% of the 165 000 children complete their elementary program, making it one of the highest completion rates in the country. One of Tijuana's oldest, largest, and most prestigious public high schools, Lázaro Cárdenas, with 3 650 students and 133 teachers, also has one of the highest rates for sending students to the Universidad Autónoma de Baja California (UABC) (Dibble, 1996).

San Diego

Politicians and average citizens alike call San Diego, "America's finest city." Its temperate climate and inviting beaches make San Diego one of the most attractive vacation spots on the California coast. It is also one of the most sought after locations for resettling, in part because its universities and large number of educated residents strongly appeal to retirees and those seeking an education. San Diego has not always been considered "a border town in the sense of being an international city," according to a recent report by a cross-national group of scholars (Rey *et al.*, 1998). Yet, like its neighbor to the south, San Diego is now experiencing significant growth, and "rapid and profound demographic and economic changes" (Marcelli and Joassart, 1998) that endow it with comparable potential for becoming "a successful binational region of major significance in the global market place" (Shirk, 2000). Its economy has had a faster growth spurt than the entire state of Califor-

nia. Moreover, San Diego has historically been a culturally diverse region, but its diversity has expanded dramatically in the last 20 years. *Latino* residents, for example, have risen to 25.29% of the total county population in 2000 from 14.75% in 1980

San Diego offers one of the finest opportunities for higher education in the country. San Diego County boasts a notable concentration of institutions of higher learning: one campus of the University of California system, two campuses of the California State University system, a private Catholic university, and over 15 community colleges and small private universities. Forty-eight school districts serve students across San Diego County. Many of these schools are impacted, just as are the schools in Tijuana. Student enrollment increased 24% during the 1990s and, more dramatically, its *Latino* student population grew by 67%. The number of low-income students has doubled, and students with limited English proficiency increased by 91%. The growth in the county has been primarily in a student population that is *Latino*, low-income, and English learners (Castruita, 2000).

Educational attainment across ethnic groups in San Diego is uneven. County math and reading scores on the SAT 9 test,⁴ not surprisingly, pointed to shortcomings in school districts with low-income, predominantly minority communities. The Pauma, National City Elementary, and San Ysidro Districts are heavily minority and rank among the lowest nationally in the SAT 9 scores for reading and math. This indicates an inequality potentially harmful to the new economy. A recent report on prosperity and poverty in San Diego cautions city planners and educational reformers that “lower regional economic inequality and greater trust between business, government, and communities lead to higher levels of economic growth” (Marcelli and Joassart, 1998:1).

*Separate Stories of Shared Spaces*⁵

The inequalities within Tijuana or San Diego demand serious attention, but when the cities are compared to each other, the differences are even more

⁴The Stanford 9 (SAT 9) is a basic skills test that compares student performance with a nationwide sample of test takers in grades 2-11.

⁵This section's title was borrowed from Tim Andre and Stephen Melton, *Separate Stories of Shared Spaces: Linking Histories of Solana Beach*, a student publication written as partial fulfillment of one of the author's undergraduate courses at UCSD.

marked. Despite sharing space, a large population segment that moves back and forth across the border, and a pattern of unbridled growth, the residents of San Diego and Tijuana have separate stories to tell about their educational opportunities. In the 1990 census, 82% of 25 year olds in San Diego County reported having a high-school education and 25%, a college education. In Mexico, the national average for students who had a high-school education was 29% in 1990; only slightly over 10% had some college.⁶ More alarming, 12% of the Tijuana population between the ages of 6 and 14 did not attend school in 1990. Between 60% and 70% of the San Diego City schools are wired for the Internet, 50 of which have computer labs; only 25 Tijuana schools have computer access.

ONGOING BINATIONAL COLLABORATION

Numerous forms of collaboration link San Diego and Tijuana into one region. Industry may exercise the oldest and most sustained collaboration between the two cities. Other long-term efforts center on the environment, health, and illegal immigration. Ongoing collaboration between the two tourist bureaus and binational affairs offices, for example, has occurred for over a decade. The results of an extensive search for collaborative projects on education, however, yielded few ongoing examples targeting K-12 education. Those that do exist are relatively recent and range from abstract forms of distributive engagement to more concrete local efforts focusing on individual projects.

Binational collaboration between Californian and Mexican scholars in the surrounding area has grown steadily over the last couple of decades. Annual conferences, such as the Binacom, joining communication scholars from both sides of the border, increasingly provide opportunities for the exchange of the latest ideas and methods in that field. U.C. Mexus at the University of California, Riverside, and the Center for U.S.-Mexican Studies at the University of California, San Diego (UCSD), are efforts formed with the express purpose of involving Mexican colleagues. A unique form of binational collaboration is a consortium recently established by the Corporation for Education Network Initiatives in California (CENIC) and its Mexican counterpart, Corporación Uni-

⁶Figures for Tijuana are unavailable.

versitaria para el Desarrollo de Internet (CUDI). This new global-age partnership is one of the more abstract forms of binational collaboration. Linking 36 higher-education institutions in California and 23 universities in Mexico, this consortium will provide the scientific and academic communities on both sides of the border with the most “robust, high-capacity, next-generation Internet communications services” available (see www.cenic.org). Networks of scholars throughout North America will have real-time access to each other and to sources of information, such as libraries. Importantly, these physical and intellectual connections will have powerful implications for K-12 education. Especially relevant to the Inter-California Strategy are the possibilities for developing meaningful binational research on pressing educational issues and for extending the services to the public schools.

Other ongoing collaboration includes more concrete interactions among representatives from both school systems. Teacher and student exchanges between Tijuana and various institutions in Southern California are one example of such face-to-face interactions. Administrators from both sides of the border have found teacher exchanges a constructive and practical way to utilize cultural and bilingual resources close to home. The need for second-language acquisition on either side of the border and the success of trial exchanges guarantee the endurance of this collaborative effort. Liability problems, however, have cut short student exchange, despite its possibilities for instilling long-lasting impressions on youth. The development of a unit for prevention of violence and crime, “Hacia una cultura de legalidad” (Towards a Culture of Legality), is another example of a working-group approach to collaboration. Meaningful and timely, this project is closely aligned with a regional vision. Designed by collaborators from both county offices of education, the curriculum packet includes 36 lessons, developed initially for one semester but now extended to cover the entire school year. Regrettably, its implementation in the San Diego schools has been slow compared to Tijuana, where the Baja California State Board of Education has adopted it.⁷

Industry is another premiere example of cross-border collaboration. While its pursuit is not education *per se*, it is at the pulse of the educational scene. The educational level of its labor force affects production, worker safety, and promotions. The high level of worker turnover, attributed to gender, poverty,

⁷Sweetwater District is the collaborating system on the U.S. side.

and immigration, as well as education, threatens a company's stability and integration into the life of the community. In informal interviews, representatives of Kyocera and CBS Battery Technology, Inc., for example, acknowledged the importance of balancing quality-of-life issues with economic growth. They emphasized the need for bilingual and multilingual abilities and cross-cultural understandings. More schooling or better utilization of existing educational resources in Mexico was of critical importance to these company representatives.

A INTER-CALIFORNIA STRATEGY

As industry representatives pointed out in brief interviews, and much of the research corroborates, education—specifically, high-quality education—is the most critical prerequisite for participation in the global economy. Capital, of course, is important, as Dean Calbreath pointed out in his 1999 article in the *San Diego Union Tribune* on “Tijuana Dreaming: A Civic Vision of Tomorrow.” However, money is not enough. Without an educated labor force composed of producers and consumers of novel ideas and materials, the imbalance will continue, and the knowledge industry, which fuels globalization, will go elsewhere. In this section, I would like to craft a civic vision of the Tijuana-San Diego region as if money were no object and borders were as borderless for education as they are for the economy (Andreas, 1999). More specifically, I would like to suggest an inter-California collaboration that involves:

- a campaign to remediate the mind-set, which exists on both sides of the border, that accepts the notion of “the other”;
- a bilateral, multisystem and multidimensional, long-term approach; and
- a refocusing of curricular offerings and instruction that are culturally and linguistically appropriate and involve computer and telecommunication.

These three components are not mutually exclusive but are a key part of each step toward a partnership among quite diverse partners.

SETTING THE CONTEXT FOR AN INTER-CALIFORNIA STRATEGY

The forms of collaboration cited below represent strategies that have shown great promise for securing a diverse and innovative education for children

across California, and, in particular, in San Diego. These strategies are effective in building systems of relations between collaborating institutions in the region and could conceivably bring about the same results if applied to a binational context. However, the success of their application to the Tijuana-San Diego partnership is predicated on wider acceptance and support from the public on both sides of the border. For change to be immediate, as the present conditions demand, the media and other vehicles for building community identity must work closely with an education initiative. If the public is not made aware of events and personalities that build on a binational identity, the relationships that are generated and the outcomes that are achieved will remain isolated incidents of collaboration. At best, it would take at least a decade to bring about the change that we need now. A partnership with forums that transcend national identity, such as the media and groups of artists, sports figures, and music personalities, is an important component of the strategy to create an inter-California identity.

The region's history, cultural distinctions, and unbalanced development today are ongoing obstacles to building meaningful and trusting relationships between the two governments and their peoples. María Puente, staff writer for the *San Diego Union Tribune*, captured these tensions best when she described the relationship between San Diego and Tijuana over the last century as:

a long marriage, one that started out with warmth and intimacy in youth, then grew cold and distant with maturity. There have been long periods when they barely spoke to each other, the silences occasionally punctuated by bickering and recrimination over broken plumbing and spilled sewage (1989).

On one side, *Tijuanenses* are “painfully aware of their dependency and subordinate position to San Diego,” according to Puente. Their inability to cross the international border as freely as American citizens is a daily annoyance. On the other, many San Diegans express concern about the permeability of the border, the drain on resources by illegal immigration, and the loss of jobs to Mexican labor. These tensions are fertile ground for biased attitudes and stereotypes that can easily threaten the development of a bilateral collaboration. The strategies suggested below are one step toward transcending these obstacles. As part of a long-term plan, they set the stage for building strong and enduring relationships. Changing long-held beliefs and practices requires an all out campaign, not unlike a political contest. Binational events that

promote goodwill, community, and a regional identity need extensive and coordinated coverage that highlights the benefits and potentialities of such action. Many isolated binational media events and arts projects are exemplary in their ability to open people's minds to new possibilities, but I have chosen to discuss briefly only two: the attendance of Mexican fans at the San Diego Padres baseball games and the RevArte project in the small Baja California fishing village of Popotla.

Media

The news media helps create and sustain community through its reporting. It identifies issues of importance to the community, informs members of the activities of community leaders, and reinforces community symbols on which identity is based. The media also defines the outsider and threats to community well-being. The notion of an inter-California region is a proposal for a new community, one that encompasses many smaller communities in one unified entity. It will require leaders, issues, and symbols that represent it and that the media can identify and cover. Residents of the region will need to identify with and be civically responsible to two communities—their own immediate community and the inter-California region—without tensions of disloyalty and transgression. The news media can be a powerful tool for setting the context of an inter-California region.

Like many events that draw large numbers of people to one side of the border or the other, the attendance of Mexican fans of the Padres baseball team at Qualcomm Stadium games is a binational media event. The fans' allegiance to sports figures supersedes national borders and years of tension between two peoples. It also brings to light the regional appeal of a baseball team. When the media covers the overwhelming response of Mexican fans, it reveals the existence of a larger community. It is also painting a different image of the "other," one that is very much like "us." It highlights loyalty, enthusiasm, and plain joy. The back-and-forth movement of Mexican Padres fans and music lovers (who attend games, rock concerts, and operas in San Diego) and U.S. music and sports fans (who attend events in Tijuana) illustrates an identification with binational symbols and perhaps even with a binational identity that does not conflict with one's national identity. This is but a

small example of the ways in which the media could cover events that have the potential of creating a binational identity. A much closer examination of the role of the news media in helping to establish a binational community is needed, but a few steps can be taken now:

- Leading San Diego and Tijuana newspapers should create a section entitled “The Inter-California Region.”
- English-and Spanish-language television stations should develop a bilingual news magazine.
- Local media should appoint a media specialist to manage the “setting of the context” for a binational community.
- Local media should also give high priority to scholarly events and educational projects, such as the Binacom conference.

Rev.Arte

Art is a tool specially suited for stirring emotions and deep reflection of oneself and the other. It is particularly effective at connecting and mobilizing individuals and groups. The work of RevArte, a collective of artists from both sides of the U.S./Mexico border, has such an effect. Known for their mural on the walls of Popotla, a small fishing village on the Baja California coast, this group of local artists “experimented with form, concept, venue, and media” to create a community effort out of a piece of art. In the process of collecting debris (found objects) and taking the time to talk to the residents, these artists enlisted adults and children in their project. When they left the site 24 months later, they had raised a discussion about the contrast between the Titanic exhibit across the harbor and the evolving mural of found objects. They had formed strong friendships. They had opened a whole community to new vistas. As a result, the residents saw an ominous yet captivating world with critical eyes. They saw outsiders as more than tourists. And, interestingly, they saw debris as useful.

The artists, too, were changed by the experience at Popotla. It reconfirmed their belief in the communicative powers of art. The response of the community moved them, as individuals, to design future projects that would interconnect history, culture, and time. One such project was the installation in Cuba at the 7th Havana Biennial, where Grupo RevArte exemplified the physi-

cal exchange of ideas through their art. They utilized cement debris, which had fallen from the historical Spanish Colonial buildings in Havana's downtown, as well as mementos from local residents and from Popotla to construct building blocks in the forms of cubes and to rally the city's residents into a collaborative display of communication. The cubes represented the "architectural memory of a city and its people"—an exploration and discovery of the sense of space and identity, according to members of the collective.

There are many other examples of collaborative efforts between the artists and cultural critics that work toward dismantling the attitudinal barriers that exist between citizens of the two sides of U.S.-Mexico border. The joint exhibitions of installation by the San Diego Installation Gallery, "inSite," are particularly noted for showing how art and artists create a space for dialogue on critical issues of the border. RevArte is only one example of how art creates a space for the formation of a new identity, in this case, the identity an inter-California region. As such, some of the recommendations for community-building projects include providing funding for:

- binational collectives that communicate a new identity of binationalism and regionalism;
- in-country collectives that participate in cross-border projects focusing on dialogue and community-building; and
- school art workshops featuring the region's groups—Native American, Chicano, Mexican, and Anglo-American.

BUILDING A BILATERAL, MULTI-SYSTEM, MULTIDIMENSIONAL COLLABORATIVE STRATEGY

In the 1980s and early 1990s, David Gardner, then-president of the University of California (U.C.), commissioned two taskforces to study the eligibility for admission to the University of California of African Americans and *Latinos* and to recommend solutions to the problem of their under-representation in the U.C. system. Independently, both taskforces came to the same conclusion: Multidimensional problems require multidimensional solutions that involve all levels of the educational system, business, and other community institutions. Both highlighted the importance of K-12 education in preparing students for higher education. Given the complexity of an Inter-California Strategy,

the regional imbalances, high stakes, and newly acquired knowledge, the only way to accomplish a meaningful and productive binational collaboration may be through a multisystem, multidimensional approach.

I turn to two promising kinds of partnerships: U.C. Links, a consortium of university-community partnerships, led by researchers representing the nine U.C. campuses, and CREATE (Center for Research on Educational Equity, Assessment, and Teaching Excellence), the outreach scheme developed by UCSD collaborators. By offering wisdom from many years' experience working for systemic change, these partnerships exemplify the expanded adage “act locally, think globally, and plan long term” (coined by the author in Vásquez, in press). Both are collaborative models widely recognized for their innovativeness, research base, and theoretical orientation. Both support, and are intricately linked by, *La Clase Mágica*, a community-university partnership that focuses primarily on first generation Spanish-English bilingual learners from Mexican immigrant communities.

U.C. Links

U.C. Links was modeled after local action and the “Distributed Literacy Consortium,” a collective of regionally dispersed research sites sponsored by UCSD's Laboratory of Comparative Cognition (LCHC) and funded by the Mellon Foundation (Vásquez, 1996). Convinced that the UCSD efforts by LCHC's Michael Cole and the author could translate into a systemwide initiative that would address issues of low K-12 achievement and minority population under-representation in higher education, U.C. President Richard Atkinson gave his full support to the fledgling consortium. When it began in 1997, U.C. Links was one of the strategies implemented to maintain the diversity of the University of California following the U.C. Board of Regents decisions to eliminate affirmative action. It was specifically designed to ensure a steady flow of qualified students from diverse backgrounds who could meet the rigor of the University of California.

The appropriately named U.C. Links system had nine teams from U.C. and the California State Universities, whose task was to examine issues related to academic achievement among minority populations, especially African Americans and *Latinos*. At each campus, the project enlisted the collaboration of

colleagues with a long history of research, teaching, and/or service with minority populations. Following the practices of the Distributed Literacy Consortium, the U.C. Links partnerships centered around after-school activities developed from the Fifth Dimension model, a theoretically based educational activity designed by LCHC collaborators, and La Clase Mágica, a bilingual-bicultural innovation of the model targeting minority underachievement and under-representation. Each site created rich environments in which to apply theory and practice while simultaneously forming part of a comprehensive effort to understand and act upon the multidimensional nature of minority under-achievement and under-representation. By summer 2000, the U.C. Links consortium comprised 33 partnerships that linked local efforts in various minority communities with university students and personnel across all nine U.C. campuses and several state university campuses.

Each university-community node established through U.C. Links develops and/or studies an educational activity specifically designed for under-represented youth. The needs and interests of researchers at the nodes determine which point(s) of contact between the university and community to target for research. Thus, the perspective on the problem of minority achievement levels and representation in higher education are as varied as the individual interests, academic disciplines, and career trajectories of the participating researchers. Taken together, however, these locally based initiatives constitute one global effort to effect change in the ways research, pedagogy, and service support diversity. U.C. Links offers a possibility of reaching a much greater number of children, across a wider age span, by involving other campuses and other communities. With time and resources, this broad system approach will provide research and practice with implications for the full span of the educational system.

The systems of relations, activities, and outcomes of U.C. Links offer a powerful resource for an Inter-California Strategy that would be mutually beneficial to both sides of the border. Extending efforts to Tijuana would add a second link with Mexico for U.C. Links. The first, headed by Professor Rosa Montes at the University of Puebla, works with children of the university staff and focuses on language development and innovative uses of technology. Professor Montes has also spearheaded collaboration between U.C. and Mexican scholars, through Mex Links. A university-community partnership could involve any of the higher-education institutions in Tijuana, and a com-

munity institution such as the Lázaro Cárdenas High School (popularly called “La Lázaro”) or any of the 25 schools with computer labs. The proposed Otay Mesa Higher Education Center also known as Project Synergy would be an ideal location for implementing a bilateral, multisystem project involving educational institutions from both sides of the border that would experiment on binationalism and education (Edgar Ruiz, personal communication, 2000). These types of collaboration could:

- add critical intellectual and material resources to solving the local problem of educational equity;
- encourage cross-border educational research on immigration, language acquisition, cultural integration, and binational collaboration itself;
- provide knowledge and practice for closing the digital divide locally and in a developing country;
- facilitate the flow of bilingual students to higher education in general and to UCSD in particular; and
- crystallize LCHC efforts to establish a sister consortium (U.C.Mex) that collaborates with U.C. Links while focusing specifically on Mexican educational issues.

CREATE

The Center for Research on Educational Equity, Assessment, and Teaching Excellence (*CREATE*) is a local response to the dismantling of affirmative action. It grew out of a UCSD Task Force on K-12 Outreach, commissioned to build a comprehensive plan for “concerted, interlocking efforts designed to enhance the educational opportunities available to all students, concentrating on those who are disadvantaged by socioeconomic circumstances” (UCSD Task Force, 1997). *CREATE* was conceptualized as a virtual center, charged with coordinating five outreach components: academic enrichment, professional development, parent involvement, the charter school, and evaluation.

Together these five components constitute a theoretically informed approach to the remediation of the educational experiences of under-represented learners. Ample studies of school reform, for example, show that unless the teacher-student learning activity is improved, efforts to increase academic achievement do not work (Haycock, 1997; Hammond-Darling

and Youngs, 2002). Studies also show that parent involvement and appropriate role models are crucial to bringing about change in students' performance. Thus, create makes a concerted effort to intensify professional development and provide teachers with the latest knowledge and skills in the field. The aims of these collaborative efforts are to change the culture of learning, while redesigning institutional structures to produce optimal learning conditions for all students. This would circumvent the slotting of students into tracks that are aimed at low academic achievement. CREATE also assigns tutors from a select pool of UCSD students to support specially designed academic enrichment programs, such as La Clase Mágica, College Advocates, and the Dance Institute. This gives young learners "big brothers" and "big sisters" who can provide much-needed tutorial assistance. Parents, too, are recruited and trained to form partnerships with the schools, enabling them to negotiate the schooling system on behalf of their children.

One of the first and most innovative strategies that CREATE instituted was the formation of collaborative partnerships with feeder clusters of local elementary and secondary schools. Organized to prepare more students from under-represented backgrounds, the partnerships' manifest purpose is to assist UCSD in achieving a student body that reflects the ethnic and racial diversity of California's population. This strategy was designed to help improve the culture of learning in low-performing schools with high numbers of under-represented students as well as to transform the beliefs and practices of educators in both the schools and the university. In essence, the goal of CREATE was to make these sites more academically rich, inviting, and socially just. Today, CREATE has formed partnerships with four clusters of schools involving a high school, middle school, and two to three elementary schools arranged in "feeder patterns" from the San Diego Unified, Sweetwater, National City, and South Bay School Districts.

The Center for Research on Educational Equity, Assessment, and Teaching Excellence marshals the talents of UCSD faculty, staff, and students to work with local educators and community groups to improve the educational environment of some of San Diego County's most challenged schools. It coordinates resources of the partnerships both horizontally and vertically. Horizontally, educators from different levels of the system concentrate efforts at the same points of the educational system to simultaneously achieve common goals. Vertically, educators target students as they move through the

entire spectrum of the educational system—elementary, middle school, high school, community college, and the university. One example of this coordination is the introduction of the Early Academic Outreach Program (EAOP), to partner with middle-school students and their parents. By receiving information about college preparation and financial aid several years prior to applying for college, these families can set goals earlier and more strategically. The program also acquaints teachers and school counselors with resources available for educational and financial assistance so that they can help their students implement their goals. Another example is the coordination of UCSD's Division of Pediatrics in the delivery of social and health services to partnership schools. The Division provides a broad vision of prevention-oriented health promotion for children, which focuses on the child within the context of family and community.

These exciting new initiatives are based on the realization that improving the educational system and enhancing equitable access to education is the key to the success of a society. Achieving educational equity and excellence requires everyone to work closely and actively with the students, their teachers, and their schools. Improved academic preparation will, in turn, improve students' opportunities to make informed life-choices—which may well include enrolling in a college, such as UCSD. The partnerships and on-campus high school will serve as models for other universities and colleges seeking to make a difference in the education of our youth—especially those from low-income backgrounds.

The most logical recommendation that grows out of the CREATE efforts is to establish a partnership with a Tijuana cluster of schools—that is, a high school and its feeder elementary and middle schools. This partnership would provide the mechanism for binational scholars and teachers to:

- track the sending patterns of Tijuana schools and the mobility within and across the region;
- study the effects of cross-border mobility on academic achievement, language acquisition, biculturalism, and the economic status of transnational students;
- develop a binational plan to serve transnational students effectively without interruption; and
- share strategies for providing high-quality education leading to advance degrees.

La Clase Mágica

Intricately connecting both U.C. Links and CREATE is La Clase Mágica, an after-school educational activity especially designed for bilingual learners of all ages. This decade-old project has its origins in the efforts of the Laboratory of Human Cognition to establish systems of relations between the university and community institutions in order to funnel resources to local children. La Clase Mágica is a premiere example of a multisystem, multidimensional approach to a social action that aims at systemic change in the education of language-minority students and their counterpart, monolingual mainstream students. Locally, La Clase Mágica staff designs, implements, and studies innovative learning environments that promote students' optimal achievement. Globally, the research staff participates in on-going, online conversations on issues of access, evaluation, funding, and sustainability with several research collectives that are dispersed statewide and across the country and world—that is, U.C. Links and the Mellon Project. Presently, it is experimenting with transplanting the model to other locations with different institutional contexts, populations, and needs.

La Clase Mágica is a demonstration site for scholars worldwide who are interested in computer-based learning, the digital divide, cognitive development, bilingualism, and new ways of addressing issues of under-representation in higher education. In 1996, along with its parent project, it influenced the development U.C. Links. That same year, a U.S. Department of Education commission studying dropouts visited La Clase Mágica in search of solutions. In 1999, La Clase Mágica was featured in the White House publication, *What Works for Latino Youth* (U.S. Dept. of Education, 1999). The following year, the National Latino Children's Institute selected La Clase Mágica for La Promesa Award 2000. This award coincided with La Clase Mágica's first attempt to disseminate its efforts to other localities. An elementary school in southern San Diego County became the first successful attempt to replicate these efforts.

Responding to the needs of first generation Mexican immigrants living in a low-income community in northern San Diego County, La Clase Mágica developed into a bilingual, bicultural innovation of the parent project, the Fifth Dimension, LCHC's core activity (Cole, 1996). It extended the original model by bringing technology to under-represented communities with little access to computers and telecommunication. Its goal is to provide sustained ac-

cess to enriching educational resources and institutional support to local communities through computer-based curriculum designed culturally and developmentally for four age groups: Mi Clase Mágica for children 3-5 years of age, La Clase Mágica for children 5-12 years of age, the Wizard Assistants Club for teens, and La Gran Dimensión for adults. La Clase Mágica's four-component structure, its focus on under-represented minorities, and its aims at enhancing K-12 academic achievement and representation in higher education make it a social action project (see <http://communication.ucsd.edu/LCM> for further details).

Grounded on a theoretical framework that mixes play and educational activity, the organizational structure of La Clase Mágica creates a cooperative environment where bilingual learners and undergraduate students enrolled in university courses at UCSD or Southwestern College collaborate on a prearranged series of computer and telecommunication activities. These collaborative encounters are meaningful ways to learn about each other as well as to exchange skills, values, language, and culture that constitute their respective worlds. Of paramount importance is the introduction of higher education to very young learners. Parents and adult members of the community are prepared so that they can interact with mainstream institutions meaningfully and productively, specifically to participate in partnerships with secondary institutions in addressing minority education. Undergraduate students have an opportunity to apply theory to practice, in real-life settings.

The lessons from La Clase Mágica provide powerful insights into the effects of culturally relevant learning activities and integrating disenfranchised minority communities into the educational enterprise. La Clase Mágica reinforces the principle that native language and culture are powerful building blocks to new knowledge and new skills—linguistic as well as academic. Its application to the Inter-California Strategy is readily apparent: establish a Clase Mágica in one of the computer-connected schools in Tijuana or at the Otay Mesa Higher Education Center, proposed in Assembly Bill 2323. Setting up such a site would:

- aid binational efforts instituted by both U.C. Links and CREATE;
- promote binational collaboration already in place with Rosa Montes at the University of Puebla;
- facilitate research and practice on language acquisition (English in Tijuana, Spanish in San Diego), culturally relevant curriculum, teacher training, and undergraduate education;

- provide opportunities to share strategies on parent involvement, adult education, community empowerment, and institutional relations; and
- enhance access to computer and telecommunication technology and to an information-based society.

REFOCUSING EDUCATION FOR A NEW AGE

The exigencies of a Global Age make conventional education impracticable. The energies invested on improving test scores, for example, are wasted on a measure that reflects little of what individuals can actually do in the real world. The emphasis on one language and one culture of knowledge jeopardizes the linguistic resources of language minority students and, at worst, handicaps monolingual speakers in a multicultural world. This focus limits individuals' ability to move easily from one cultural context to the next, a necessity that increasingly characterizes the Global Age. The common rigid adherence to a scope and sequence curriculum often limits the learning potential of advanced students and frustrates those who require more time and attention. Alarming, in many classrooms across California, the potential of technology for powerful learning encounters has not been achieved. In many others, the potential is virtually nonexistent.

The new global age and, in particular, the inter-California region demand a dynamic, high-quality education that is not focused on what John Dewey described as the education of elders. It calls for an education of the future; a multilingual, multicultural education that is mediated by the latest information technology. Education must reinforce advanced knowledge of English and Spanish as well as versatility in multiple cultural norms. Importantly, education must move away from focusing on pathologies and focus instead on innovation, bi-cognitive development, and a bi-consciousness.⁸ These conditions raise two questions: How do we make this happen when the six hours of the school day are spent on exactly the opposite of what is needed? And who can offset the imbalance in the available resources of the two educational systems? The recommendations below offer ways to address this concern in

⁸Personal communication with Alberto Ochoa, SDSU professor. He cites W.E.B. Dubois's notion of bi-consciousness.

terms of broader community involvement and the refocusing of curricular offerings.

Broader Community Involvement

- Make the proposed Otay Mesa Learning Center an experimental binational school. Involve business, the school system, and government in funding state of the art instruction, curriculum, and technology for global education. Use models, such as La Clase Mágica and the Neve-Shalom experiment in Israel, to develop governing policies and culturally relevant curriculum.⁹
- Establish a binational history project on the inter-California region as a way of codifying the area as one. Funding by both school systems and universities should support the development of texts for K-12 students.
- To increase the number of engineers, continue the Tec Tours to biotech companies. Assign a full-time coordinator for tours for junior-high-school students from both sides of the border. Bring engineers and other scientists to the schools for job fairs and mentoring.
- Promote bilingualism and biculturalism in the workplace and in the school through free courses, advancements, and recognition. As one of the area leaders suggested, “bring up the bilingual folks.”

Changes to K-12 Curricula

- Offer courses in global citizenship that link K-12 students on both sides of the border on class projects on pollution, poverty, and immigration.
- Connect San Diego schools with the Telesecundaria television course that offers a series of distance learning lessons targeting middle-school students in Mexico.
- Institute those two-way immersion programs, such as the Amigos Program, that have had the highest long-term academic success of bilingual education programs (Cazabon, *et al.*, 1998).
- Create partnerships between schools and programs, such as La Clase Mágica, that will complement a school's efforts in the areas of parent involvement, professional development for teachers, bilingual and bicultural development, technology readiness, and academic enrichment.

⁹See La Clase Mágica website at www.communication.ucsd.edu/LCM.

- Wire schools in Tijuana and facilitate Internet service. Industry is in the position to provide access to communication technology for both sides of the border.

This essay has laid out the possibilities for an Inter-California Strategy by pointing to specific projects and activities that have much to contribute to the creation of a new curriculum, a new community, and a new identity. “The task for scholars is to provide the content,” said Tom West, executive director of CENIC, in relation to the ongoing efforts to create a telecommunication structure that connects universities and schools on both sides of the border. The programs and activities discussed above are ripe for the kinds of research and practice called for by the new conditions in society. Some of these projects have already received attention by city planners and school reformers but have been set aside for one reason or another. The funding and the intellectual resources to revive them and help others extend the work across the border will have to come from a unique partnership between industry, the educational system, and the government on both sides of the border.

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