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Border Brief
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EDUCATION POLICIES AND PRACTICES IN THE U.S.-MEXICO BORDER REGION: A LOOK AT SAN DIEGO AND TIJUANA

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Brief Overview

The socio-political history of what is now the Mexico-U.S. border region is marked by conquest and divorce, a literal splitting of a once continuous land and related people; separate since 1848, but also increasingly integrated since the initiation of the North American Free Trade Agreement (NAFTA) in 1994. As "distant neighbors," Mexico and the United States share much—economically, environmentally and historically—but they also differ significantly with respect to legal, cultural and educational practices. As a result, communities along the border reflect a complex and uneven social, economic, linguistic, and cultural hybridization (See: Table 1).

Today, as the border region develops into a single, interdependent urban system of global significance, greater attention is needed to its educational and workforce development challenges. Yet, to date, few formal studies have examined educational issues on both sides of the border region, and how they relate. To shed light on this topic, this brief examines the educational challenges and opportunities confronted by teachers, policy makers and stakeholders of the 10 contiguous U.S. and Mexican border-states. Specifically, this brief draws attention to issues related to teacher preparation, assessment, and effectiveness in the U.S.-Mexico border region.

The first section provides a general discussion of educational contexts of the United States and Mexico. This is followed by a detailed analysis of the particular context of the border region, in which key teacher development, assessment and effectiveness issues on both sides of the border are examined. Finally, this brief points out observations for policy makers related to teacher preparation, assessment and effectiveness in the California-Baja California region, a vital sector of the border region.

Table 1: Relevant U.S. and Mexican Economic and Demographic Indicators

2006	*United States*	*Mexico*
National pop.	301 million	108.7 million
Pop. growth rate	.894%	1.153%
Border state pop.	61.6 million	12.2 million
Border region pop.	7.1 million	7.1 million
Border indigenous groups	26	7
GDP (PPP)	$11.73 trillion	$1.07 trillion
Unemployment:	4.8%	3.6%
Poverty rate	12%	40%

The U.S. & Mexican Educational Contexts

Recent federal educational initiatives in the United States and in Mexico are intriguing. Following U.S. civil rights legislation and the national 'war on poverty' in the 1960s, education and social policies worked to narrow the achievement gap between white and minority students by guaranteeing a minimally adequate level of achievement for non-whites through compensatory education, competency testing, school desegregation, equalization of school funding, and affirmative action programs. As the U.S. federal and state education focus has shifted from equity to excellence over the last two decades, however, ethnic and economic achievement gaps stopped narrowing (and even began to widen) in the 1990s, signaling setbacks in U.S. progress toward educational equity.

According to Education Trust (Ed Trust), a project of the American Association for Education, great inequities remain in state and local revenues per U.S. student, especially in poor and minority school districts. There was a $907.00 per student difference between high poverty and low poverty districts (disfavoring poorer dist-ricts); and $614.00 per student difference between high minority and low minority districts (disfavoring high minority districts).

"[In the U.S.]… achievement gaps stopped narrowing (and even began to widen) in the 1990s…"

Table 2: Key Educational Indicators for the United States and Mexico

	United States	*Mexico*
Curriculum development	Regional / local	National
Duration of compulsory education	12 years	10 years
Education spending (% of GDP):	5.7%	7.1%
Education spending (% of total government expenditure):	17.1%	24.3%
Education spending (% Primary):	39.5%	49.1%
Education spending (% Secondary):	35.3%	28.7%
Education spending (% Tertiary):	25.2%	19.6%
Primary teacher salary > After 15 years:	$34,705.00	$13,294.00
School level by age and participation		
Pre-school/ Pre-escolar	3-4 (60%)	3-5 (66.9%)
Elementary/ Primaria	5-10 (98+%)	6-10 (94.1%)
Middle or Junior High/ Secundaria	11-14 (98+%)	11-15 (87%)
High/ Media Superior	15-18 (88.1%)	16-18 (58.6%)
College/ Superior	18 + up (41%)	18 + up (25.2%)

The border region is adversely affected by the general trends that reduce performance indicators among poor and minority students in the United States, where current performance gaps —divided by ethnic and economic factors— are among the largest of Organization for Economic Cooperation and Development (OECD) countries. Almost twice as many high poverty schools have teachers 'out of field' (34%) as in low poverty schools (19%). Low minority schools also have fewer (21%) such teachers than high minority schools (29%). Almost twice as many teachers with 3 or fewer years of experience teach in high poverty and minority schools (21% and 20%, respectively) as in low poverty and low minority schools (11% and 10%, respectively), signaling greater experience and staying power among teachers in more privileged districts.

"In addition to poverty, ethnicity factors heavily into education in the U.S. context, with significant bearing on resource allocation in the border region."

In Mexico, patterns of educational inequity tend to favor the border region vis-à-vis the poorer central and southern areas of the country. A 2005-06 Mexican National Educational System report found that while the national illiteracy rate was about 8% in 2006, poor southern states suffer the worst rates of illiteracy in the country: Veracruz (13%), Guerrero (18.2%), Oaxaca (18.3%), and Chiapas (19.4%). On the other hand, northern Mexican border states have much lower rates of illiteracy than the national average: Baja California (1.4%), the Federal District (2.7%), Nuevo León (2.8%), Coahuila (2.9%), Tamaulipas (3%), Baja California Sur (3.4%), Sonora (3.8%), and Chihuahua (3.8%).

"Northern Mexican border states have much lower rates of illiteracy than the national average …"

The Mexican National Education System report also noted that graduation rates by state also tended to favor most northern border states. At the primary school level, Coahuila, Sonora, Nuevo Leon and Baja California are distinguished as states with high graduation and low attrition rates; Sinaloa is classified as low graduation and low attrition rates. Tamaulipas and Chihuahua were the only border states classified as having low graduation and high attrition rates (alongside poor southern states, like Oaxaca and Chiapas). For middle school/junior high, Coahuila, Sonora, and Nuevo Leon continue to have high graduation and low attrition rates. At this level, graduation scores improve in Tamaulipas and Sinaloa (though Sonora continues to suffer high middle school attrition rates). Baja California and Chihuahua are at the high end of states (like Oaxaca and Chiapas) that have low graduation and higher attrition rates.

These trends suggest some important challenges for Mexico's northern border states. First, overall, we see that northern border states enjoy higher levels of educational attainment and performance than elsewhere in Mexico, particularly with regard to literacy. Second, despite overall higher levels of educational attainment along the border, several border states have important difficulties maintaining students in school through graduation, due perhaps to the large number of students who migrate to and from border states, or immediately enter the workforce after middle school. High attrition rates and low graduation rates in major industrial states like Baja California and Chihuahua are especially disturbing because they hinder progress to higher levels of education that would facilitate the development of a highly educated workforce capable of high-tech and high-value added production.

Recent Educational Reforms

In Mexico, the government rolled out a national preschool reform program in 2002, followed by national

middle and high school reforms. The recently released Mexican National Development Plan, 2007-2012 (MNDP) addresses the kinds of educational inequities that were formally addressed for the first time four decades ago in the United States. The MNDP posits a shift towards decentralization and away from "vertical control" and excessive "government bureaucracy."

These efforts are applauded by recent research at the Universidad Pedagogia Nacional-Tijuana and Universidad Iberoamericana-Tijuana, which criticizes the efficacy of 'top down' education structures, and suggests that teachers need to be empowered to become more involved in educational reform at the local level. Also, education experts increasingly encourage the involvement of K-12 teachers in research on student learning to help them become better educators. These approaches were highlighted in Spring 2007 at the first Bi-national Action Research Conference at the University of San Diego.

Mexico's new direction in education contrasts sharply with recent efforts in the United States, notably the 2001 *No Child Left Behind* (NCLB) initiative, arguably the largest U.S. federal educational intervention in history. Its central goals were to close the achievement gaps in public education by having a 'highly qualified teacher' in every classroom and accurate measurement of student and school-wide Adequate Yearly Progress (AYP). What is more, NCLB is a sea change from local to federal control and emphasizes K-12 national standardized testing for teachers and students, rather than the collaborative model for development of standards for teachers and students evidently increasingly favored by Mexico's federal government.

As it faces reauthorization, NCLB is currently being contested by many state and national educational and child advocacy groups. Law suits filed against the federal government by states include charges that the testing does not objectively measure English Language Learners academic achievement, that the testing is implemented in ways that undermine its validity and reliability, and that the data gathered from this testing is used punitively instead of as formative assessments that bring support and guide program improvement.

In short, the different educational legacies and recent shifts in approach will likely hold important implications for U.S.-Mexican educators, and significantly affect future educational development in the border region.

The Border Educational Context

The U.S.-Mexico border region constitutes a highly integrated social and economic system stretching 1951 miles along 10 contiguous U.S. and Mexican borderland states. The two sides of the border have developed complex, symbiotic relationships ranging from concerns from environmental and health impacts that require coordinated cross border solutions. However, driven by economic pressures, this already complex border region population is expected to double by the year 2025. The Texas Comptroller's 1998 publication, "Bordering the Future: Challenge and Opportunity in the Texas Border Region" found that, although the U.S. and Mexican governments have treated the border region with benign neglect in terms of economic development, education, and social programs in the past, several cities now reflect significant integrated economies on both sides of the border.

Indeed, the local pushes and pulls of a global economy impact the 24 border counties that make up the roughly 2,000 mile U.S.-Mexico border in the U.S. states of Arizona, California, New Mexico, and Texas, as well as the 25 municipalities (*municipios*) in the Mexican states of Baja California, Coahuila, Chihuahua, Nuevo Leon, Sonora, and Tamaulipas that abut the border. Laredo, Texas and Nuevo Laredo, Coahuila channel the most goods and merchandise among Southwest cities ($130 billion). El Paso, Texas and Ciudad Juarez, Chihuahua is another point of trans-border industry and manufacturing. Juarez has more *maquiladoras* than any other border city. San Diego, California and Tijuana, Baja California reflect extraordinary foot (14 million annually) and passenger traffic crossings (1.4 million annually).

Despite this vibrant economic activity —and its importance as a conduit for trade— several portions of the border region also suffer significant levels of poverty, especially relative to other parts of the United States. Ed Source and a recent National Center for Education Statistics report rank U.S. states' poverty ranking based on five indicators: the percentage of students eligible for subsidized meals; the percentage of families with school-age children who are living below the federal poverty line; the percentage of female-headed families with preschool-age children who are living below the federal poverty line; rural per capita income; and rural per pupil property wealth. Along the border, New Mexico —in addition to several other low-performing, non-border states (notably, Kentucky, Louisiana, Mississippi, Oklahoma, and Arkansas)— is in the "Urgent" quartile on all five indicators of the poverty gauge.

In addition to poverty, ethnicity also factors heavily into education in the U.S. context, with significant bearing on resource allocation in the border region. Ed Trust found that an average of $908 less per student is

spent on students in the districts educating the most students of color, as compared to the districts educating the fewest students of color. According to Ed Trust's analysis of Fiscal Year 2001-02 data (See Table 3), all four border states fall into the lowest 25 states —and two (Texas and Arizona) fall in the lowest quartile—for independent state funding for poor and minority schools.

Table 3: Poverty and K-12 School Funding in U.S. Border States

State	Poor children	Title I allocation	Title I funding per poor child	Title I Rank
California	1,288,493 (15.4%)	1,649,697,549 (14.8%)	$1,280	27
New Mexico	85,331 (1.0%)	103,273,759 (0.9%)	$1,210	32
Texas	902,369 (10.8%)	1,018,467,898 (9.2%)	$1,129	38
Arizona	213,295 (2.5%)	187,860,284 (1.7%)	$881	50

Seven U.S. states educate the majority of the nation's Latino students. However, California, Texas, and Arizona combine to educate 59.3% of all Latino students, with Florida, New York, Illinois, and New Jersey combining to educate 19.8%. In 2005, the Pew Hispanic Center reported data for the decade of most concentrated change —between the 1993-94 and 2002-03 school years— and found many distinctive features related to this large and growing population.

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According to the same study, Latino students accounted for 64% of the students added to public school enrollment. Meanwhile, blacks accounted for 23% of the increase and Asians 11%. White enrollment declined by 1%. However, Latino youths are much more likely than white or black youths to attend public high schools that are large, that have a high student-to-teacher ratio, and that have a substantial proportion of students who come from relatively poor families. Schools with larger enrollments are associated with lower student achievement and higher dropout rates. Similarly, lower instructional resources as expressed in higher student/teacher ratios are also associated with lower school performance.

It therefore is not surprising that the UCLA Chicano Center reports disturbing educational outcomes regarding Latino students. For every 100 Latina/o elementary school students, 54 will eventually graduate from high school, 11 will graduate from college, 4 will obtain a graduate or professional degree, and less than 1 will receive a doctorate. Of every 100 first-time Latina/o college students in California, 75 begin at the community college. Of these, only 7 will transfer to a four-year institution, and 6 of the 7 will transfer to a Cal State rather than a University of California campus.

Given the mobility of students between states and systems, it is difficult to present similar observations related to the outcomes of a disconnected educational pipeline in Mexico. However, a keynote address at the most recent conference of the Consortium of North American Higher Education Collaboration (CONAHEC) raised a concern that Mexican college students who study abroad do not return to Mexico, resulting in a kind of brain drain.

Mexican reformers have also faced challenges in meeting federal educational goals: educational equity, quality of the educational process and outcomes, and reform of the institutional management. With respect to educational equity, for example, only about half of indigenous people 15 or older have completed an elementary education. Meanwhile, over 130,000 Mexican children are homeless, and attention to children with physical or learning disabilities is only recently becoming widespread. While these problems are less severe in most border-states, education problems in interior states take on a cross-border dimension since approximately half a million children of migrant workers do not obtain access to primary education.

Another striking feature in Mexican schools is that the student/teacher ratio is significantly different in federal and state schools. Federal schools, which educate approximately 10.4% of students in these states, run secondary class sizes with approximately 16-20 students per teacher and 24 students per teacher at the primary level. However, state schools, which educate approximately 82% of Mexico's youth, maintain class sizes 20-40% larger at secondary and 50% larger at elementary levels. This suggests important challenges as Mexican states, especially northern states which have been increasingly encouraged to take on a larger share of the burden in education as outlined in the MNDP.

While the border region is more advanced on key educational measures than other regions, educational deficiencies and greater state government responsibility for providing K-12 education places a significant strain on border states. That is, border states require a higher level of workforce development than current state-level educational resources provide, especially with regard to training for high technology industries. Studies suggest that this, in turn, reduces the synergies possible in cross-border production and trade between Mexican border

communities and their counterparts. Thus, the border region's educational deficits result in significant opportunity costs and lost competitiveness.

In short, the U.S.-Mexican border region is a distinctive context that must not be treated the same as other parts of the two countries. The educational needs and challenges of the border region require careful analysis, and greater understanding of the impacts of transnational influences, particular the impacts of migration both to Northern Mexico and the U.S. Southwest.

Educational Issues in San Diego-Tijuana

Due to the enormity of a discussion about the educational characteristics of the 10 contiguous border states, the rest of this examination will focus on the California-Baja California region regarding K-12 teacher preparation, teacher assessment, and teacher effectiveness, with limited use of comparative data from other states. In particular, this section focuses on the San Diego-Tijuana region, which has rather atypical characteristics for a border twin-city.

This part of the border region is distinguished by the fact that San Diego is the seventh largest city in the United States, and the largest U.S. city on the border. Also, San Diego County is much more ethnically and economically diverse than many border counties in Arizona, New Mexico and Texas.

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Indeed, this contrast is even evident when comparing San Diego County to Imperial County, California's only other county bordering Mexico. A closer examination of San Diego County and Imperial County reveals that they are very different from one another. San Diego has a land border that is two-thirds the length of Imperial County's, but a Mexican immigrant population that is nearly seven times larger. Imperial County is primarily rural (with approximately 200,000 residents), while San Diego County is primarily urban or suburban (with close to 3 million residents). Imperial County has higher poverty rates and primarily consists of Latino and White residents; San Diego County has a lower poverty rate (but greater disparity among communities) and is a gateway for immigrants from all over the world.

As a result, many issues that commonly affect border communities are not as readily evident in San Diego County. Still, while it is masked by its large, urban population, San Diego County definitely shares important characteristics with other border counties. For example, the majority of San Diego County residents were born in the United States, with only 22 percent born outside the country. Yet almost half of the county's foreign-born residents (292,749) are from Mexico, and 6 percent of the 720,751 children under the age of 18 were born in Mexico. Moreover, 23 percent (634,982) of San Diego County residents are of Mexican descent, and 27 percent identify as Latino.

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In terms of education, there are significant disparities between communities with high concentrations of Mexican immigrants and Latinos and those with lower concentrations within San Diego County. In the 2004-05 school year, 23 percent of children enrolled in San Diego County public schools were designated English language learners (ELLs). Two-thirds of San Diego County school districts on the border served a larger proportion of ELLs than the county average. Two school districts in those communities (National Elementary and San Ysidro Elementary) served student bodies that were more than 60 percent ELLs, and one (San Diego Unified) served as many as 37,000 ELLs.

Teacher Preparation and Assessment in San Diego-Tijuana

To understand the educational context of the San Diego-Tijuana region, it is useful to compare the structural and cultural aspects of teacher development on both sides of the border. This teacher development context will later be linked to teacher assessment and effectiveness. A side by side comparison of systemic educational descriptors reveals many differences in teacher development, beginning with the recognition that teacher preparation in CA is evaluated by the California Commission on Teacher Credentialing in Sacramento, CA.

Every U.S. teacher education program must address a state body of Teacher Performance Expectations (TPEs) in their coursework. Content standards for in-service teachers are designed separately. In Mexico, teaching standards are established by the Federal Secretary of Education, in Mexico City, as are the curriculum for in-service teachers. Table 4 compares

teacher credentialing requirements in the United States and Mexico.

Table 4: U.S. and Mexican Teacher Credential Requirements

	United States	Mexico
Teaching requisites in private schools	None, local hiring	None, local hiring
Teaching requisites in public schools	Credential, local hiring (CA credential is accepted in other states, while other states' credentials generally not accepted in CA)	State college credential, hired at state school; federal college credential, hired anywhere in Mexico. Approval of national teachers union and municipal, state, or federal education authority required for employment.
Requisites for credential	K-12: B.A. + state issued credential and various content exams	K-6: High school + 1 year teacher training; 7-9: B.A. + teacher training
Salary for teachers	National: $46,597 CA: $56,444 National Board certification +$10,000.00	BC: $6,000.00 per year

How teachers on both sides of the border are assessed and declared 'ready to teach' is outside of the scope of this document. However, generally speaking, teacher credentialing in the United States has taken two paths: a combined undergraduate degree and teaching credential (mostly for elementary education); or a 5th year program (where a teaching credential is authorized in 12-14 months of education coursework and fieldwork). Each state is responsible for establishing and evaluating its standards and credential granting institutions' achievement of meeting state standards. Each state allows for and is working to reduce the number of teachers with 'emergency' or temporary credentials to meet the need for teachers in 'hard to staff' geographical or content areas (e.g., math and science).

According to *Kids Count SD*, the average of the median annual household income in San Diego border communities was $12,678 less than the average of the median annual household income in other San Diego County communities. To illustrate this disparity, two Border communities (National City and Mid-City) had the lowest median annual household incomes in the county (less than $30,000), while four non-Border communities (San Dieguito, Jamul, Del Mar and Poway) had the highest median annual household incomes (more than $70,000). The median annual household income for the entire state ($47,493) was higher than the average for Border communities and slightly higher than the countywide annual median. Countywide, the median annual household income for Latinos ($34,555) was lower than for whites ($52,089). A similar disparity existed at the state level.

California may be doing more than other states to prepare teachers related to these and other complex dynamics to help all students in K-12 Schools. Nonetheless, teacher preparation in the United States and even in California, where the complexity of English and academic language development is re-cognized, has been incoherent in assessing and addressing teacher preparation as related to language, culture, and poverty issues in border communities.

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Since the start of *No Child Left Behind*, there has been a push to attract people with depth of applied content knowledge to the teaching field by sidestepping state credentialing programs by taking a content-specific exam. In addition, all teachers who complete an accredited state teacher education credential program must pass a content-specific exam in order to teach in a public school. In short, to be 'highly qualified' to teach, candidates must: 1) have a bachelor's degree; 2) be certified by the state; and 3) demonstrate subject matter competence according to NCLB approved test. In 2006, California legislators resisted a federal movement to equate items 2 and 3 above.

California's new teacher assessment currently recognizes both English language development and academic language development as foundational elements in teaching, learning and assessment. By the summer of 2008, each teacher preparation program will demonstrate teacher readiness through either a local or statewide Teacher Performance Assessment (TPA), guided by 13 core Teacher Performance Expectations (TPEs). Key aspects of teacher assessment include candidate understanding of particular content, teaching context, instructional planning, delivery and assessment as they relate to identifiable student learning strengths and needs. All of these issues impact these standards used to evaluate teacher preparation in the complex San Diego-U.S. border region.

Regarding teacher assessment in Tijuana, it is ueful to look to the MNDP, which refers to teacher preparation

and assessments of teacher quality: "The intention is: to strengthen the teacher's skills related to instruction, research, sharing of learning and use of new technologies, and aligning them with the national standards of high quality; to stimulate learning, reinforcing ethical values in students and preparing students for careers. To do this, specific action will be designed to enhance initial teacher preparation and continual professional development."

The MNDP states that "working to articulate a national system of evaluation, accreditation and certification, with the goal of strengthening the practices of self-assessment, peer assessment, formal accreditation and national standardized exams for graduation, as they are triggered by reviews by the Inter-institutional Committees for the Evaluation of High Schools (CIEES), the Council for the Accreditation of High Schools (COPAES) and the National Center for High School Evaluation (CENEVAL), among others. Accreditation for educational offerings is essential in order to maintain the social and economic value of high schools. With the reinforcement of regulatory mechanisms and quality assurances, ineffective programs will not be proliferated and will not limit the formation of productive and competitive citizens that the country requires."

Bi-national Indicators of Teacher Effectiveness

The very term, teacher effectiveness, is controversial among educators. The question is, 'How do we evaluate the impact that any particular teacher has on students' learning? Given the complexities in teaching and learning, in addition to the complexities in the immediate and regional context, any discussion of teacher effectiveness is inadequate and inconclusive at this point.

One measure of student learning and teacher effectiveness is international rankings. A recent bright spot in international education competitions was Mexico's first place academic team in geography, in which the United States came in second, in 2007. Still, according to the OECD, the United States ranks no higher than 23rd of 29 countries in math assessments and Mexico no higher than 29 in virtually all math categories: percent of students in the highest achievement level (Level 6) in Math; math achievement of the highest-performing students; and math achievement of high-SES students.

In terms of teacher effectiveness in the border region, high school completion rates for U.S. Latinos provides another measure. The UCLA Chicano Center reports the following disconnects in the K-12 to UC or CSU pipeline regarding Latino students. For every 100 Latina/o elementary school students, 54 will eventually graduate from high school, 11 will graduate from college, 4 will obtain a graduate or professional degree, and less than 1 will receive a doctorate. Of every 100 first-time Latina/o college students in California, 75 begin at the community college. Of these, approximately 7 will transfer to a four-year institution. 6 of 7 transfer to CSU rather than a UC.

Meanwhile, useful teacher effectiveness measures are somewhat less available in Mexico. There are currently many concerns about NCLB's validity in measuring U.S. teacher or school-based effectiveness due to the misalignment of state standards and curricula, and questionable standards for measuring school and student performance. Therefore, one concern is that efforts to improve teacher performance in Mexico through U.S.-style incentive programs may have little beneficial impact on teacher effectiveness. A recent RAND study of Mexico's Teacher Incentive Program, for example, presents important concerns about the effects of salary incentives offered to teachers to improve student achievement. Most of the programs reviewed in this study showed only modest improvements in student test scores, and these improvements (when they were observed) were often short-lived. Moreover, there was evidence that teachers devoted extra time to test preparation and this extra attention might have been partly responsible for the positive effects observed in some programs.

On the positive side, thirteen years ago, Valle Verde Elementary School opened in Tijuana, serving Mixtec indigenous and *mestizo* families and teaching bilingual and bicultural curriculum. Today, it is a demonstration site for visitors from around the world, with respect to culturally and linguistically responsive curriculum, teaching, and programming. Valle Verde is a federal school that adapts federal teaching resources, which address Mixtec language and culture from throughout Mexico, to the local context and population. Its initiative is federal, and its success and ongoing development is a result of contributions by state, civic, and community efforts.

Conclusions

There is still a paucity of information and analysis on the educational challenges facing the cross-border region. The data referenced in this brief was compiled from several government and private think tank sources in the United States and Mexico, for varying purposes and at different times. Therefore, it is important to stress that this brief is more of a border education barometer

than a precise diagnostic tool. Still, some useful conclusions can be derived from this analysis.

First, it appears that the state of border region educational success and failures is not due to a lack of solutions. In fact, Education Trust research has identified several aspects of highly successful school practices among both national and border region schools: clear goals and standards, challenging curriculums aligned with standards, extra instruction to students as needed, and (most important) teachers who are well-prepared to teach the subject.

Second, with regard especially to integrating Latino "border kids" into the U.S. school system, *Children Now* makes several similar recommendations:

- Support effective programs (e.g. pre-kindergarten) and practices to accelerate the time it takes for English learners to be re-designated as "fluent English proficient";
- Provide targeted support for students who have not yet passed the High School Exit Exam—including English learners—to ensure that students graduate with the abilities and competence they need to thrive in higher education and the workforce;
- Assure that all parents can support their children's education by enhancing adult education programs that improve academic skills and language proficiency of immigrant families.

A third, and critical point, is that both Mexican and U.S. policymakers and educators appear to treat teaching and learning in the 10 border-states as if they are the same as anywhere else. In reality, border populations differ significantly from other regions in both Mexico and the United States. Moreover, on both sides, border schools tend to be under-funded, with great variations in K-12 funding per student. This is due to the fact that funding formulas for education — whether based on property taxes or federal redistribution— are generally disadvantageous for border communities in both Mexico and the United States, and particularly with respect to poor children in the region. Indeed, for too many poor and linguistically diverse students living in the border region, the pipeline of educational access is broken.

Studying educational practices from a bi-national perspective is essential to understanding the factors that hinder the progress of the border region. The resource limitations facing U.S. and Mexican border educators — combined with the complex social and cultural dynamics of the region— severely impede the development of the region's workforce. These challenges are reflected in the struggles of U.S. teachers to integrate non-native speaking, itinerant student populations into their classrooms. They are reflected in the pressures and social costs imposed on Mexican families by the industrialization of Northern Mexico, which has disrupted traditional family structures (for example, by bringing more mothers into the workforce) and has dramatically reshaped the design of urban communities.

The continued economic progress and integration of the border region will greatly benefit from further examination of how its particular dynamics —its diverse demographics, varied linguistic and cultural groups, and severe socio-economic stratification— impact educational practices, student performance, and overall workforce development. One thing that may help to better understand and address these issues is greater cross-border collaboration between educators to examine shared challenges, creative solutions, and future opportunities for cooperation.

In the distinctive Tijuana-San Diego border region, we can find positive and distinctive examples of linguistic, social, and geo-political border crossing. In this region of contrast, contradiction and chaos lie seeds of educational transformation that begin with honoring the richness of the context, planning with and for its preservation and empowerment, and collaboration across language, culture and institutional barriers.

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