

8) Evaluation

The BorderLink Project used internal and external evaluation every year, resulting in formative and summative evaluation reports. Over the life of the project, the external evaluation teams worked in close collaboration with the BorderLink Project staff in designing evaluation methodologies, implementing data collection, interpreting data, and reporting findings.

Formative evaluation provided ongoing feedback regarding the extent to which the project made progress in implementing the project goals. The assessment of activities was ongoing from the beginning of the project, and it was embedded into the project through such devices as online registration, data management, and end-of-workshop evaluation forms. The summative evaluation assessed the overall impact of project activities and interventions on student participation, achievement, and motivation, with consideration for local, state, and national standards.

The evaluators used multiple measures to determine the impact of the project. A sampling of data sources and instrumentation that were used over the five years of the project are included in the accompanying chart.

DATA SOURCES AND INSTRUMENTATION

<i>Data about . . .</i>	<i>Used Such Instrumentation As . . .</i>	<i>Samples came from . . .</i>
Demographics	California Department of Education's online data site: DataQuest	Teacher and student data
Level of BorderLink implementation in schools	Surveys, interviews, and review of project records	Participating teachers, administrators, counselors, and students
Analysis of change in schools	Case studies and structured site observations using BorderLink's "site visit protocol"	Participating teachers, administrators, counselors, and students
Professional development	Informal observations, interviews, and end-of-workshop evaluation forms	Teachers, administrators, counselors, and students who participated in project-sponsored training sessions
Teacher technology skills	CTAP ² online self-report	Teachers in all BorderLink schools
Curriculum/course alignment with California standards, BorderLink goals, and research-based best practices	Staff review	All courses that were created by the BorderLink Project
Student outcomes on criterion referenced tests	Results from the California High School Exit Exam (CAHSEE)	Students in BorderLink schools
Student outcomes on criterion referenced tests	Results from AP tests	Students in online AP courses
Student outcomes on norm referenced tests	Results from standardized tests	Students in BorderLink schools
Student outcomes on college entrance tests	Results from SAT/ACT exams	Students in BorderLink-sponsored college entrance test preparation courses
Best practices	Review of Innovative Technology Projects	19 selected teacher projects
GenYES student reactions	GenYES student survey/self report Student grades	All GenYES students
Student content acquisition and course participation	Student grades	All students
Analysis of student completion rates	Student grades and drop rates	All students
BorderLink Online Educational Conference	Attendance data and end-of-workshop forms	All attendees

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Evaluation Approach

The evaluators studied the effect of online course offerings on student achievement and post-secondary opportunities. As displayed in the table to the right, students in the BorderLink Project had a range of courses each year of the grant available to them. All courses were online, so that consistent with the intent of the grant, students in these remote and isolated communities had access to rigorous content and AP courses to increase their opportunity for qualification to the university systems. Over the five years, the number of AP courses being offered more than doubled, as illustrated by the table on this page. Many of these courses were provided through a partnership with the University of California College Prep Initiative.

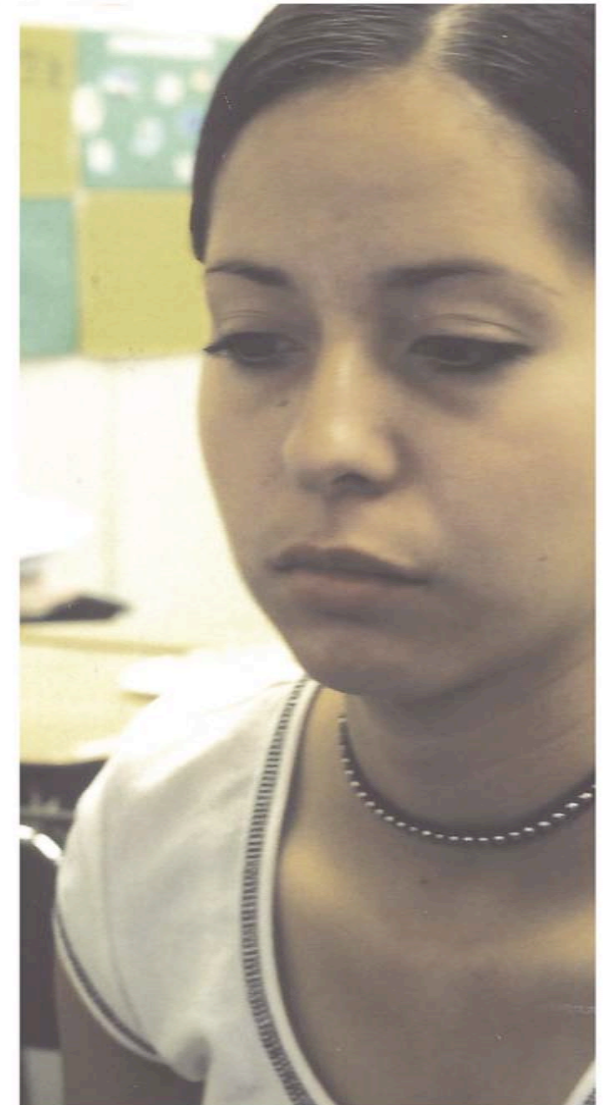
Online Course Offerings						
Courses		1999-00	2000-01	2001-02	2002-03	2003-04
Advanced Placement	AP Statistics	X	X	X	X	X
	AP Biology			X	X	X
	AP English & Composition			X	X	X
	AP English Literature		X	X	X	X
	AP English Language		X			X
	AP Physics			X	X	X
	AP History			X	X	X
	AP Calculus	X	X	X	X	X
	AP US Government & Politics	X	X	X	X	X
	AP Microeconomics	X	X	X	X	X
AP Spanish					X	
Honors	Psychology	X	X	X	X	X
	Shakespeare				X	X
	Composition	X	X		X	X
	Sociology	X	X	X	X	X
Pre-AP	Geography				X	
	Music Appreciation				X	
TOTAL		7	9	11	15	15

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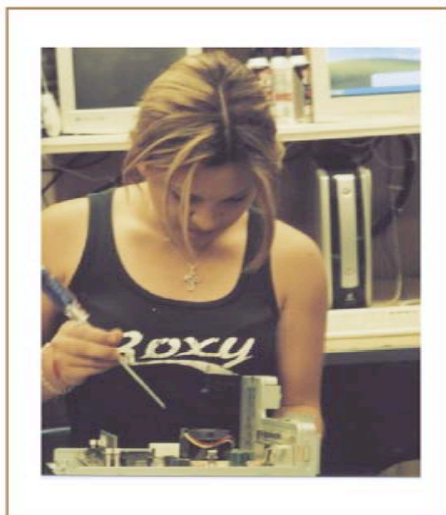
The table below shows student enrollment in online courses and drop rates. The drop rates decreased after the first year of the project, and the completion rates also improved among students who were actively enrolled in the second, fourth and fifth years of the project. The third year was a transition year, with the primary responsibility for enrolling students in online courses and providing appropriate support shifting from centralized control to the schools. The improvement during

years four and five suggests more effective counseling of students who were interested in online learning to extend the course offerings in their high schools. This also suggests that the target population of largely Title I eligible students from rural and isolated communities can be successful in the online environment with the proper level of support. Online learning becomes a viable option for bridging the digital and academic opportunity divides.

Term	Enrolled	Active	Dropped	Completion Rate	Year
Fall 99	66	50	16	22%	1
Spring 00	85	66	19	20%	
Summer 00	12	8	4	38%	
Fall 00	61	48	13	79%	2
Spring 01	50	46	4	76%	
Fall 01	99	89	10	35%	3
Spring 02	71	71	0	63%	
Fall 02	79	79	0	87%	4
Spring 03	66	65	1	85%	
Fall 03	116	116	0	83%	5
Spring 04	80	80	0	76%	



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The following table shows that the majority of students achieved average or above average grades in the second, fourth, and fifth years of the project. In some cases, there were a disproportionate number of “F” grades. Analysis of the student records indicated that in almost all cases the problem was non-participation from the beginning of the course. Students would enroll electronically, but then after the semester began, would not officially “drop” the class if they changed their plans, despite repeated attempts to contact the students via email or through the school site counselor. The fifth year of the project saw additional improved achievement by the students. Overall, the achievement level went from a low of 20% during the first year to a high of 94% during Year 5.

Student Grades 1999-04		
Term	Above or Average Grades	Year
Fall 99	20%	1
Spring 00	20%	
Summer 00	25%	
Fall 00	67%	2
Spring 01	50%	
Fall 01	30%	3
Spring 02	46%	
Fall 02	80%	4
Spring 03	75%	
Fall 03	94%	5
Spring 04	87%	

Average or Above Average is “C” or better. The rate is calculated on grades for those who were actively enrolled in the classes. Year 3 (01-02) grading was pass/fail.

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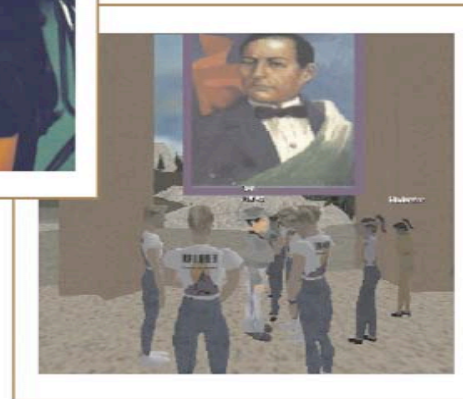
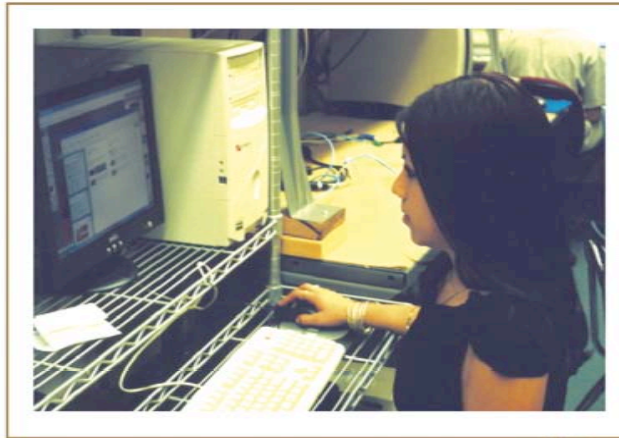
Summary of Evaluation Findings

According to the external evaluation team (Educational Support Services of San Mateo, California) who assessed data collected from the five years of the project, “BorderLink met or exceeded its initial goals of supporting courses to meet the needs of students across the rural areas of the two counties. In addition, BorderLink is clearly aligned with and supports major initiatives of the California Department of Education for improvement of and increased rigor in secondary education, and increased access to online AP courses for students in rural areas.”

Additional key findings from the evaluation team included:

- By the fifth project year, BorderLink students were achieving at a high level in the online courses. Most students achieved at average or above average levels (94% and 87% during fall and spring semesters, respectively). Students who were unsuccessful in the online courses generally were those who did not access the course after enrolling online and/or who lacked the necessary independent learning skills.

- Many students took more than one online course.
- There was a high level of overall access to computers for students.
- Students made increasingly greater use of the Internet each year of the grant.
- Students had positive reactions to their BorderLink experience.
- Multiple student support strategies were incorporated into the BorderLink Project (including providing on-site mentors for students in online courses, online mini-courses in test preparation, websites to support career readiness, and training counselors to prepare students for post-secondary opportunities).
- BorderLink helped meet the academic needs of many students in Imperial and San Diego Counties, particularly those who resided in the more rural areas of the region, and who did not have access to as many courses or resources as those who attend larger comprehensive high schools.
- The Online Educational Technology Conference that was offered during the fifth year and the LinkWorld environment demonstrated the viability of virtual environments for this population of students and teachers, and they hold promise for sustainability of the project after the funding cycle ends.
- The continued support of the Imperial County Office of Education and the San Diego County Office of Education for the BorderLink Project is further indication of the value the program provided in the region.
- BorderLink provided a rigorous, standards-based academic opportunity that met many of the mandates of the new *No Child Left Behind* requirements in the areas of high academic standards for students and provisions for quality teachers.



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