

Latino Education Issues Task Force Workshop

Fostering a Collaborative Vision of
a One-Gigabit Ubiquitous Network
for California's Latino Community



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About CENIC and the One Gigabit or Bust™ Initiative

The Corporation for Education Network Initiatives in California (CENIC) is a not-for-profit corporation formed in 1997 by the California Institute of Technology, the California State University, Stanford University, the University of California, and the University of Southern California. It later expanded to include the California Community Colleges and statewide K–12 school system. CENIC’s mission is to facilitate and coordinate the deployment, development, and operation of a set of seamless and robust advanced network services.

CENIC’s One Gigabit or Bust Initiative™ addresses critical technical, policy, economic and implementation challenges facing the delivery of one-gigabit broadband to all Californians by 2010. The Initiative brings together the interests of research, education, commerce, state and local government, and the general public to identify the opportunities and obstacles to achieving one-gigabit connectivity throughout California by 2010 and begin to establish an action plan to achieve this goal. For more information, see www.cenic.org.

About HACU

The Hispanic Association of Colleges and Universities (HACU) is a national, nonprofit organization that represents 359 member higher education institutions in 26 states and Puerto Rico. HACU membership includes Hispanic-serving institutions (HSIs) and other premier colleges and universities that collectively serve more than two-thirds of all Hispanic higher education students. HACU’s membership also includes leading higher education institutions in six Latin American countries and Spain. HACU is the nation’s champion for Hispanic higher education, with outreach that extends from precollegiate and college scholarship programs to technology in higher education, workforce development and lifelong learning initiatives in service to the country’s largest ethnic population. For more information, visit www.hacu.net.

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Introduction

The mission of the One Gigabit or Bust Initiative's Latino Education Issues Task Force is to unite California's Latino community in a collaborative vision for ubiquitous gigabit connectivity and to illustrate the positive social, political and economic impact one-gigabit connectivity holds for Latino education and quality of life. The action plan developed by the Task Force will be part of a larger action plan for deploying a ubiquitous gigabit broadband network throughout California.

On October 16, 2003, CENIC's One Gigabit or Bust Initiative Latino Education Issues Task Force and the Hispanic Association of Universities and Colleges (HACU) held a joint workshop to address the best means to bring ubiquitous Internet access into underserved Latino communities. The workshop was held during HACU's 17th annual convention in Anaheim, California.

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Latino and non-Latino members of California's educational, trade and technology communities outlined their vision of the One Gigabit or Bust Initiative working with—and within—the Latino community. In an interactive workshop format, attendees shared their experiences, expertise and advice for helping the Latino community cross the digital divide.

Through a series of exercises, participants were challenged to consider:

- How the Latino community could benefit from ubiquitous broadband
- The challenges preventing Latinos from perceiving ubiquitous broadband as valuable
- The best methods to communicate the value of a one-gigabit network

While we recognize the many obstacles facing broadband access today, the focus of the Initiative is long-range in scope: ensuring the successful design, deployment and ubiquitous availability of next-generation broadband services by 2010. The resulting discussions and suggestions for introducing such a ubiquitous one-gigabit network into the Latino community, as well as additional research, are represented in this paper.

Real-world examples of how groups and individuals successfully introduced technology into the Latino community are included in the section, "Success Stories" (*see page 10*). These inspiring stories offer strategic reference points for a cyberinfrastructure model in which communities and technology converge and flourish.

Paving the Way

Several major in-state initiatives have, over the past several years, worked to ameliorate the pressing issues of the digital divide and access to community technology. Their significant work warrants acknowledgement and incorporation into the One Gigabit or Bust Initiative. Efforts such as those underway by the California Community Technology Policy Group, Children's Partnership, Community Collaborative Fund, Community Technology Centers Network, the Community Technology Foundation, Latino Issues Forum, PolicyLink, and The CompuMentor, to mention just a few, are critical to the success of the Initiative. We believe it is through the unified vision of these and other holistic, community-focused groups that community technology can most effectively achieve the goal of one gigabit to every home.

Executive Summary

As a part of the One Gigabit or Bust Initiative, the Corporation for Education Network Initiatives in California (CENIC) retained the services of the Gartner Group, an international, technology-focused research and advisory firm, to determine the economic potential of an acceleration of next-generation broadband deployment in California. The report, entitled “One Gigabit or Bust Initiative™ — A Broadband Vision for California,” concluded that “a \$376-billion upside in gross state product by 2010 is made possible with the implementation of a focused One Gigabit or Bust broadband initiative. Moreover, 2-million new jobs could be created.”

In 2003, CENIC created the One Gigabit or Bust Roundtable, organized around topical task forces, with the goal of identifying the opportunities and obstacles to achieving ubiquitous, one-gigabit access throughout California by 2010 and establishing an action plan to achieve it. The Latino Education Issues Task Force is charged with identifying the next steps needed to ensure that Hispanic-serving institutions (HSIs), their students and community groups are engaged in the fostering, deployment and utilization of this one-gigabit ubiquitous network.

California’s Emerging Majority

The latest U.S. Census reports that Latinos comprise more than 33 percent of California’s population, or roughly 11 million people. They are, says Sen. Richard Alarcón (D-CA), “the new emerging majority.”

But despite their impressive—and growing—numbers, less than six percent of individuals in decision making positions in the State of California are Latino. Latinos earn the lowest wages of any ethnic group,

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and almost half of all Latinos in the workforce haven’t graduated high school. Clearly, California’s vast educational, economic and political opportunities are not reaching its largest and fastest growing community.

Access to information technology (IT) and the integration of IT into the Latino cultural dynamic are linchpins of Latino educational, economic and political empowerment.

The Tomás Rivera Policy Institute points to access to information technology (IT) and the integration of IT into the Latino cultural dynamic as linchpins of Latino educational, economic and political empowerment. “The digital revolution has created opportunities to improve our economic outlook through high-wage IT jobs, reinvent our public institutions through the creative use of digital media, develop our social networks, and enhance educational outcomes for children and adults,” it reports.

By leveraging our own research and analysis with that of like-minded institutions, CENIC aims to create a step-by-step action plan for introducing a ubiquitous broadband network into the underserved Latino community. To achieve the one-gigabit goal, however, key obstacles must be addressed. In particular, we must recognize the digital divide and address the inequities that exist.

Creating an Action Plan

According to “A Nation Online: How Americans Are Expanding Their Use of the Internet,” U.S. Department of Commerce, February 2002, a number of groups are more likely not to be Internet users. The “Offline Population” includes:

- People in households with low family incomes—75 percent of those who live in households where income is less than \$15,000 and 66.6

- percent of those in households with incomes between \$15,000 and \$35,000
- Adults with low levels of overall education—60.2 percent of adults (age 25+) with only a high school degree and 87.2 percent of adults with less than a high school education
- Hispanics—68.4 percent of Hispanics and 85.9 percent of Hispanic households where Spanish is the only language spoken

These members of the population represent the “digital divide,” which Gartner defines as:

... the gap in opportunities experienced by those with limited access to technology, especially the Internet. This includes, but is not limited to, accessibility challenges in the following areas:

- Economy: being unable to afford a computer
- Education: not knowing how to use a computer
- Physical Ability: disability, such as blindness, that causes difficulty in graphical environments

These divides are real and will not be solved solely by the deployment of broadband. Research for the One Gigabit study showed that a substantial portion of people believe these issues need to be resolved as a part of the One Gigabit of Bust Initiative.

During this first workshop, Latino leaders and leaders from other underserved communities, as well as community members, were asked to share how one gigabit networks would impact the Latino community; to identify the challenges to achieving a ubiquitous one-gigabit network; and to determine what they envision as next steps for achieving a one-gigabit network.

The attendees identified seven segments that would be positively impacted by one-gigabit networks: communications, community, education, employment, quality of life, small businesses and technology.

Next, attendees identified key obstacles that are delaying one-gigabit connectivity to the Latino community. These barriers included:

- The community perceives that technical knowledge and expertise is not valuable

- Internet access and devices are too costly
- The community has a low level of literacy and familiarity with broadband technology
- Lack of relevant community-specific content*
- The Internet is perceived as unsafe

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Last, attendees proposed next steps for achieving one-gigabit networks by 2010. These included:

- Educate the community about the benefits of a one-gigabit network
- Develop devices and applications based on community preferences
- Engage community leaders
- Render Internet and broadband technology appealing to mothers
- Introduce human infrastructure in tandem with network infrastructure
- Create community hubs where residents can learn about and use technology

The Latino Education Issues Task Force’s next steps will be based on this workshop, future workshops, and current available research.

*Interestingly, the Rivera Institute’s study found that culturally specific and bilingual Web sites alone do not motivate the Latino Internet nonuser to get connected. Additionally, after Latinos gain access, the issue of language is less of a motivating factor in using the technology than is the availability of targeted, community-specific content and personally relevant information (e.g., housing, job opportunities, access to family members).

The Promise of One Gigabit

One gigabit is neither a technology nor a transmission speed. It is not merely high bandwidth. And it is not about capacity. One gigabit is about the capabilities that the capacity enables. It is about transforming our personal, professional and civic lives; and providing each person and every home in California with the ability to be both an information user and an information producer. When every home, business and school achieves one-gigabit connectivity, the new information-centric, constantly connected world will surpass our wildest dreams by improving *everyone's* quality of life—not just the educated and the affluent.

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We asked participants of the workshop, “What would a communications vehicle such as a one gigabit network do for your community? Outline three ways the network would enhance the economic development of your community.” The attendees’ answers were then mapped into the seven categories previously identified as those to be positively impacted by one-gigabit networks: communications, community, education, employment, quality of life, small businesses, and technology. Their insightful and often visionary responses are listed below.

Communications

Next-generation broadband provides a much bigger opportunity than today’s Internet and traditional voice communications. Communicating becomes the

exchange of information via human speech, pictures, videos, audios, data sets, broadcast television or a myriad of other yet-to-be-developed techniques.

Within the Latino community, next-generation broadband could offer personal and business communications vehicles that strengthen the bond of the existing family and community and, at the same time, widen horizons.

Workshop participant examples include:

- Wider horizons—learning and personal growth beyond local community
- Change the characteristics of business, education, recreation and social meetings, interactions or operating characteristics
- Better and cheaper communication to family and friends overseas
- It will break language barriers because communication can be accessible in different languages
- Enhance the governmental and community information exchange so a community can see what government has to offer and government can find out the needs of the community

Community

Family life, community and neighborhood ties are highly valued by Latinos. Broadband connectivity could enhance these personal structures by uniting neighbors with common concerns, and influencing neighborhood participation and activism while providing a global overview. Neighborhood residents could conduct or participate in local, national, and international cultural activities, exhibitions, craft shows, plays, musical events, parades and church activities.

Workshop participant examples include:

- Microcommunity, neighborhood enhancement
- Know your neighbors—safety, security, etc.
- Community growth
 - Beyond traditional boundaries of neighborhoods, schools and churches to an international community based on common goals and concerns. Membership would be fluid, changing as member issues changed.
- Crime prevention (wireless cameras)
- Environmental benefits—people work from anywhere—creating less traffic and less pollution

- Awareness of national/internal issues—better communications
- Interactive, always-on electronic community bulletin board in every home
- Increase personal and community participation in the design of education and policy making

The Internet and high-speed connectivity offer a panoply of time-saving, productivity-enhancing alternatives to just about every aspect of a Latino’s day-to-day life.

Education

All agreed that the introduction of ubiquitous broadband connectivity would result in a transformation of educational opportunities. To date, research universities had the distinct advantage of readily available access to multigigabit high-speed networks. As the cyber-infrastructure expands, however, more universities, state colleges, community colleges and K–12 teachers will benefit from better access to research and leading research experts.

Workshop participant examples include:

- Educational advantages
 - Online courses and distance education
 - E-mail services
 - Registration applications
 - Grades/transcripts
 - Conversing with faculty or staff
 - Financial aid applications
- Enhance the educational system through interaction with “the best minds” of the world
- Children can receive enrichment, homework help and tutoring in their homes in the evenings (when help is most needed) by quality teachers, educational therapists and professionals (scientists, historians, artists, etc.)

- Enhance the lifelong, continuing education for adults
- Lifelong learning—information, lessons, experts available 24/7 on hobbies, business, parenting and educational issues
- Customized K–12 teaching based on students’ learning styles/needs
- More students enrolling in higher education institutions
- Curriculum support
- Enhance/support education for working students
- Students will do better in school because they have access to research materials previously only available to them at a library or cyber café
- Laptop computers included in financial aid packages for every student
- Enhance student learning through virtual and in-person mentoring and tutoring
- Enhance educational, business and social communications with Mexico and other countries
- Enhance the quality of teachers by helping them learn new techniques

Employment

Workshop participants felt a key concept was that of a job portal that could deliver higher-level employment opportunities into the community. Like many of today’s job portals, employees could search for employers and vice versa, have access to a searchable database of resumés and available jobs, and reference a listing of businesses and types of skills those companies typically seek. For a student deciding on a career or an adult searching for a new career, a portal of this kind would offer everything necessary to make an informed, long-range decision: a database of jobs, required skill sets, areas of study and education requirements.

The new gigabit-enabled portion of the portal could house live, virtual mentors to counsel job applicants on interviewing skills or resumé writing. Plus, the portal would bring employees and employers together. Interview appointments could be requested and confirmed on the site and informational and job interviews could be hosted on the portal site through video conferencing.

Quality of Life

The Internet and high-speed connectivity offer a panoply of time-saving, productivity-enhancing alternatives to just about every aspect of a Latino's day-to-day life. Healthcare, transportation alternatives, financial services, and entertainment all could be delivered via a gigabit network in a "just-like-being-there" way.

Workshop participant examples include:

- Easy-to-access and customizable entertainment, such as movies, TV, music, concerts
- Instant communication with family and friends
- Interconnect services, education, entertainment, communications in a common infrastructure
- Immediate access to consumer-related services such as e-shopping (like QVC-TV) and e-communications to home countries
- More Web sites serving the Latino community in both English and Spanish
- Enhance artistic collaboration and distribution as well as awareness of local artists and art
- With proper funding, make developments available and mandatory to all households
- Convergence of all forms of communication—voice, data, video, television—will enable:
 - Education, research
 - Business opportunities
 - Emergency notification
 - Disaster prevention

Everyone from tailors and seamstresses to butchers and grocers to mechanics and budding entrepreneurs could benefit from access to the global market brought to their door via next-generation broadband.

- Access to financial services, including e-banking, e-small business loans, e-paying utility bills, e-sending money to Mexico
- Active, self-determined policy making, community design, and identity

Small businesses

Latino-owned small businesses can especially benefit by a gigabit network. Broadband connectivity and technical literacy could boost productivity and expand the reach of all aspects of these small businesses—marketing, sales, ordering, delivery, accounting, payroll—all of which add up to more revenue for the business and the community as a whole.

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Technology

An easily accessible one-gigabit network emits a fire hydrant stream of communications opportunities and enables dramatic new technological increases for both appliances and applications. As broadband connectivity becomes a more and more seamless aspect of the Latino community and its members' lives, the cost-saving facets of these new technologies would be discovered and embraced.

Workshop participant examples include:

- HDTV everywhere
- Wi-Fi for everyone
- Universal Internet access through a wireless, no maintenance Internet appliance
- E-books should be pushed
 - Lower textbook costs
 - Stimulate computer use
- International voice over IP at low or no cost
- Integrated communication system
 - Phone, entertainment, business, life needs
 - One we get to choose
 - Open sources
- Preconfigured information appliance in each home for medical, social and educational needs

Existing Barriers

At the onset of the workshop, many attendees met the gigabit vision with a high degree of skepticism, arguing that the majority of Latinos struggling to meet the basic needs of food, clothing and shelter, haven't the time nor the energy to concern themselves with a perceived luxury like broadband technology.

While this concern is a valid one, it is not the obstacle it may at first appear to be. Community experiments have shown that when a community's higher-level needs are fulfilled, attaining basic needs like shelter, clothing and food often becomes easier, thereby raising those at the lower end of the economic continuum, as well as the overall quality of living.

There was also a concern that it was irresponsible to talk about a gigabit future when many in the Latino community don't have access to broadband today. History has shown this to be an incorrect assumption. Many countries were without adequate telecommunications infrastructure until the advent of wireless communications. Today, those countries have leapfrogged their technological disparities and are, in many cases, ahead of the United States in digital telephony deployment. In the case of California's Latino community, it is possible to leapfrog from having no broadband technology directly to next-generation broadband technologies. These new technologies can be custom-tailored to the Latino community and made far simpler to use than today's clunky PCs and broadband connections.

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By applying this concept of leapfrogging communication technologies, the attendees began focusing on strategies that would establish the one-gigabit network as a high-value, must-have for every household, business and school in the Latino community—and providing community members with another avenue to efficiently meet all their needs.

Overcome negative perceptions of technology. Presently, many Latinos place a higher value on televisions, wireless phones and stereos than they place on PCs and Internet access. Individuals interested in technology and computers are often seen as geeks or nerds and are not respected or admired for their knowledge—leading to an unfortunately small percentage of Latinos pursuing high-tech careers.

Many in the community are also ambivalent about the Internet and its proposed benefits. Some studies have revealed that this population is concerned that increased Internet usage will erode the highly-valued Latino family structure, that increased technological influence will lead to children and other family members spending time alone in front of a PC rather than together. Some Latinos have also expressed a concern that the Internet is not a safe environment for children and is a risky setting for managing finances.

Educate the community to overcome misperceptions of cost, complexity of use and relevance to daily life. A large percentage of the Latino population is presently neither computer- nor Internet-literate. Some believe that, as adults, new technology is too difficult to learn and question its relevance to their day-to-day lives. Interestingly, however, research in the Latino community illustrates that once members learn to use the technology, they become avid users of it.

Recommendations for Reaching the Community

This paper, along with upcoming activities from the Latino Education Task Force, seeks to shine a light on the promise of one-gigabit technology and broadband Internet in the Latino community. In an effort to shift present perceptions about the value of technology and one-gigabit networks, attendees recommend that the One Gigabit or Bust Initiative:

Seek out and engage Latino leaders. Influential members from the business community, schools, churches, neighborhood councils and the entertainment world should be tapped to help communicate the value and relevance of technology. As most grassroots efforts have proven, individual success stories and personal experiences have the power to influence a critical mass of believers and afford large-scale, positive change.

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Appeal to women and mothers. Mothers are an important sector to reach within the Latino community. They are well-regarded and influential members of the family and the community at large. To gain their support, workshop attendees advised that mothers and grandmothers be informed of and trained to access the wealth of health information, educational opportunities, employment options and community resources that is available online—and accessible through one-gigabit networks. It is suspected that once these women personally experience the benefits, they will convey the information throughout their families, thus raising the perceived value and trustworthiness of the technology.

Introduce human infrastructure alongside the technical infrastructure. For one-gigabit networks to be successful, a human infrastructure must be introduced in tandem with the hardware and software. Too often, valuable servers, routers and applications are deployed within communities, only to languish as a result of short-sighted planning, lack of technical support and a failure to employ adequate maintenance and training staff.

For one gigabit networks to be successful, a human infrastructure must be introduced in tandem with the hardware and software.

It is imperative that the initiative include scalable human resources dedicated to supporting and enhancing the network. If the network is deployed without this human infrastructure, workshop participants posited that it is likely to fail.

Develop customized devices and applications. Workshop participants were critical of vendors who focused on market dominance and financial success versus specific user/community preferences. They strongly advised that applications and devices be developed based upon the Latino community's unique needs.

They further recommended that market research be initiated within the Latino community to discern the following: What types of hand-held devices appeal to different segments of the population? How should portals be designed to appeal to the community? What applications are of highest interest to specific groups within the community?

These devices should be based on industry standards, interoperable and functional across multiple regions. They should be easy to use, possibly a Net appliance. A user's location should never limit the individual from using the device. It should have anywhere, anytime access to the gigabit network.

The cost of the device should be minimal, yet the attendees cautioned that the devices should be

The firmware should be upgradeable and users should have the option to add more memory when necessary. Requiring the community to constantly purchase new devices is unacceptable.

robust enough to evolve as technology advances. The firmware should be upgradeable and users should have the option to add more memory when necessary. Requiring the community to constantly purchase new devices is unacceptable.

The service should also have a prepaid option. It was noted that many members of the community are hesitant to commit to a monthly service due to a lack of a regular address to receive bills. Prepaid services also offer users more flexibility and a means to track their spending.

Create community hubs. Churches, schools, libraries and community technology programs are important venues for spreading technical literacy. These centers offer a relaxed learning environment for new users learning how to use computers and Internet technology. These centers also frequently become meeting places in which the neighborhood can collaborate on projects that benefit the community.

To ensure equitable access, some participants proposed that the most impoverished communities in California be identified and targeted to receive federal, state and private funding in the forms of computers, teacher training, software and grants. These specially-identified hubs would include two or more schools in close proximity in which more than 85 percent of students are eligible for free or reduced school lunch and that meet most of the following criteria:

- Have a California Academic Performance Index decile of two or lower
- Have a ratio of more than six students per instructional computer and/or more than 15 students per instructional multimedia computer
- Have a ratio of more than nine students per computer with Internet access

- Have Internet access in less than 35 percent of the students' homes

The Federal Communications Commission and the California Public Utilities Commission should redefine the Universal Service access model to promote the design, deployment and ubiquitous availability of next-generation broadband services. At its inception, the Universal Services model was a noble one: offset the paradigm of “plain services” haves and have-nots by offering communication access services at one low cost to those in rural or poverty-line areas. However, as much of the nation moves closer to ubiquitous broadband scenarios, Universal Services access runs the risk of becoming the very discriminator it was designed to alleviate—inhibiting broadband service, both wireless and wired, to low-income communities and encouraging the digital divide. By consolidating next-generation broadband services into the definition of Universal Services access, the FCC and the California Public Utilities Commission can promote innovation amongst industry, hasten ubiquity and encourage a narrowing of the digital divide on all fronts—economic, educational, political and technological.

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Success Stories

Bridging the digital divide and creating a nation of culturally diverse, technology “haves” necessitates more than just a wider distribution of computers. It demands the construction of a revolutionary, new paradigm in which information technology spans the challenges of access, education and culture to meet the specific needs and goals of the Latino community. The Internet, particularly as part of a broader spectrum of ubiquitous, next-generation broadband services, presents an ideal tool for such a task—but only as much as it is leveraged within a larger schematic of community development and growth.

The findings presented here indicate that a successful community-wide shift in the Latino community’s perception of advanced technology is linked foremost to the confluence of geographic, educational and cultural access. In order for meaningful change to occur, Latino communities need not only increased physical access to hardware and software, but greater educational and training opportunities to maximize the potential of these tools, and a wider array of relevant content and cultural support.

Many chapters of regulatory history counsel against government policies that promote specific technologies. However, a high capacity physical link is not so much a technology solution as a platform for innovation and a basis for service-level competition. It should be a basis for a future of technology discovery, and the creation of a new common medium that can bind us all together.

—Reed Hundt
FCC Chairman, 1993–1998

A successful community-wide shift in the Latino community’s perception of advanced technology is linked foremost to the confluence of geographic, educational and cultural access.

The success stories that follow reveal the potential for change through a one-gigabit broadband network. They point to the eagerness and capability of our underserved markets to embrace the IT revolution. And prove that technological investment in California’s Latino communities can—effectively and cost-efficiently—narrow the digital divide.

Casa Familiar (*see Computers In Our Future, p. 11*), took a holistic, community-centric approach by offering advanced technological access and grass-roots activism within a preexisting neighborhood hub—the local teen center and fitness facility. The result was a computer-technology center in which access to computers, technical training, and job and housing information served all levels of the community, from at-risk youth to the elderly.

The University of California College Prep Online (*see University of California College Prep Online, p. 12*) provides advanced coursework, test preparation and professional development to students and teachers in rural and low-income school districts. By offsetting the inequalities of college preparatory course availability, UCCP encourages the achievement of Latinos in higher education—a key to full participation in the information age.

The Latinas Juntas program, (*see Coming Together, p. 14*), underscores the critical roles peer support, mentoring and communication play in shifting deep-rooted cultural pressures and empowering those on the front lines of change.

The emerging majority is heeding the call of a new technological marketplace—and the implications are as exciting as they are vast. We offer these examples as models and look forward to continued progress.

Computers In Our Future: Teaching Individuals, Building Community

The Computers In Our Future Initiative (CIOF) (<http://www.ciof.org/>) ran from 1997 to 2001. It supported California's underserved populations through increased access to computer technology, training and jobs for those in low-income communities. Funded by a grant from The California Wellness Foundation as part of its Work and Health Initiative, CIOF awarded monies to 11 community-based organizations to develop and support new visions of today's community technology center. CIOF was unique in that it combined technology access and training with an emphasis on fulfilling the particular technology needs of a community. In this way it was able to serve as a voice for community technology in the state policymaking process.

Within the 11 chosen technology centers, CIOF grant money provided training, technical assistance and support, and access to hardware and software; increased job training and job placement opportunities; increased exposure to educational and housing opportunities; and community-based planning and action expertise to increase access to computers, training and jobs for those who come in the future.

Some centers focused their technology resources on assisting and educating youth, others on the homeless and runaways, and still others on women. Services ranged from providing health care to work skills to housing opportunities. But all utilized the growing field of information technology to engage the community, promote activism and leadership, and offer the kind of services that ensure the community and its members continue to grow, learn, and most important, are empowered.

Computers In Our Future sites have established community technology access and training centers in low-income neighborhoods across California. Their locations range from Siskiyou County in the north to San Ysidro at the southern border.

Case Study: Casa Familiar

Based in San Ysidro, a low-income community of 34,000 with no high school or major employers, Casa Familiar (<http://www.casafamiliar.org/>), in partnership with the San Diego Housing Commission, was one of CIOF's computer technology centers. Casa Familiar offers access to computers,

One of the most rewarding—and financially effective—aspects of programs like Casa Familiar is that they inspire those they touch to reach out to others. In this way, program dollars ripple outward, reaching far beyond individual recipients and predetermined time frames.

training and jobs from an existing teen center and a fitness facility, where it doggedly pursues its mission to “allow the dignity, power, and worth within individuals and families to flourish by enhancing the quality of life through education, advocacy, service programming, housing and community economic development.”

Casa Familiar builds community. It serves community members from small children to seniors in an area that primarily comprises under-represented populations at lower income levels. Center highlights include the Beyond a Second Chance for the Future program, which helps at-risk youth and young adults develop life skills and expand their education, provides training in marketable skills, and guides participants in the ins and outs of community activism. Community seniors are engaged in a Computer Club, and children aged 6–11 are invited to Computer Camp. Collaborations with other community services and organizations include a Web page collaboration with the San Diego Police Department and a HUD information kiosk with federal housing information in the Casa lobby.

One of the most rewarding—and financially effective—aspects of programs like Casa Familiar is that they inspire those they touch to reach out to others. Computer Camp participants regularly return to serve as mentors and tutors of new enrollees; Beyond graduates teach adult workshops or offer community outreach services. In this way, program dollars ripple outward, reaching far beyond individual recipients and predetermined time frames.

But nothing speaks of progress like hearing it first-hand. Victor Orozco is a graduate of several Casa workshops. The following is excerpted from an article written by Victor in 2001 for Casa Familiar's online newsletter. It shines a promising light on the potential of programs like CIOF to initiate positive educational, career, housing and political change for California's Latino population.

I was born in Guadalajara, Jalisco, Mexico and raised in Tijuana B.C. I became a U.S citizen in 1996. I first came to Casa Familiar in 1997 when a friend invited me to come and use the gym. I met Teresa Murillo and Dennis Hildebrand, who helped me with my homework, and started to get me interested in computers. Because I didn't speak English very well, it was really hard for me, but Teresa and Dennis helped me practice my English while I was learning to use the computer. I participated in some workshops, such as Front Page 98, and created my own Web page.

Computer Camp participants regularly return to serve as mentors and tutors of new enrollees.

Once I got to be pretty good with computers, I started conducting Web design workshops for teenagers at Casa. Teaching at Casa helped me get a job at Beyer Elementary School and at Sunset Elementary School. I teach children's and adult computer application classes. I also work for S.W. College in San Ysidro as a computer lab technician.

In 1998 I graduated from Southwest High School, and by that time I knew how to use computers and could speak English a lot better. I just finished my Associate Degree in Computer Systems at Southwestern College, and passed my A+ Certification. Presently I'm in my 3rd semester of CISCO router computer networking, and my goal is to become a CCNA (Cisco Certified Network Associate) and, after that, a CCNP (Cisco Certified Network Professional).

University of California College Prep Online: Helping Underserved Students Bridge the Gap to Higher Education

It's an unfortunate truth that both the availability and quality of college preparatory courses varies widely between school districts—and that this forms yet another barrier to higher education for many rural and low-income students in California.

Founded in 1999, the University of California (UC) Santa Cruz-based UC College Prep Online (UCCP) is effectively dismantling that barrier. By providing media-rich, online college preparatory courses to high-school students who otherwise might not achieve eligibility for admission to the University of California system, California State University system, and other top universities, UCCP fills a void in schools where competitive college-preparatory courses are simply not available and increases the number of California high-school graduates who achieve college admission. In addition, UCCP provides test preparation, academic support and professional development to teachers through an annual Online Teaching and Learning Summer Institute.

How Does UCCP Work?

UCCP offers online, college-preparatory courses at no cost to eligible California schools. The program provides all the necessary courseware and materials; schools are responsible for supplying the hardware and network connections, as well as the structured supervision and hands-on laboratory requirements of science courses. UCCP uses CENIC's Digital California Project network, plus CD-ROMs, textbooks and other networks to deliver Advanced Placement (AP), honors and pre-AP courses.

What Do Students See?

UCCP students both register and access their UCCP courses through the UC Gateways system. Specific help is given in assessing students' progress against UC admission requirements—they can measure themselves against the eligibility index, determine whether they meet the requirements and seamlessly enter their progress into an application for admission. Students may also access the system's other features, which include information about college choices and career planning.

Cybermentoring

In academic year 2002/03, UCCP piloted a cybermentoring program that matched targeted UCCP students with upper division undergraduates to provide subject matter tutoring and college advisement utilizing e-mail and synchronous whiteboard and discussion tools. UCCP students who participated achieved higher pass rates and grades in online courses. UCCP now employs seventeen cybermentors from the UC Santa Cruz, Davis, Los Angeles, Irvine, Berkeley and San Diego campuses who cover all of UCCP's subject areas and are accessible to all students.

The strength of the program is based on the strong partnerships created at participating school sites and those school administrators who are committed to providing the best opportunities to their students.

Course Development

UCCP both develops advanced coursework and acquires coursework from existing curriculum providers such as commercial publishers and other educational institutions. Each course UCCP offers is fully certified as meeting UC entrance requirements via means specified by the UC Academic Senate.

Exam Review

In addition to AP courses, UCCP offers test preparation for all California students. These online study aids incorporate diagnostics, multimedia review and practice exams. UCCP provides test preparation for AP, as well as the SAT and ACT exams.

UCCP Eligibility Criteria

UCCP serves California comprehensive public high schools and designated small schools that meet one of the following criteria:

- Schools with a state rank of 1 through 5 on the Academic Performance Index

- Schools with less than 20 percent of graduates continuing to a 4-year college or university
- Schools where more than 50 percent of students are eligible to receive free/reduced lunch
- UC Partnership Schools

UCCP Summer Institute

In July 2003, UCCP inaugurated its first Online Teaching and Learning Institute, designed to provide practical training for secondary-level educators interested in the effective use of technology to increase academic access and achievement. This form of professional development for teachers is expected to take on increased significance as the state works to address essential components of the federal "No Child Left Behind" legislation.

Enrollment and Student Services

In academic year 2002/03, UCCP enrolled 4,605 students in 6,066 semester enrollments with an 89 percent completion rate, representing 222 schools in 56 counties. In addition, UCCP sponsored statewide access to AP Exam Review and SAT/ACT test preparation. A total of 9,246 students enrolled in more than 20,000 AP Exam Review sections and to date, approximately 13,000 students have taken the SAT/ACT test preparation course.

Moisés Torres, UCCP's director, attributes the success of the program to two things. "The strength of the program is based on the strong partnerships created at participating school sites and those school administrators who are committed to providing the best opportunities to their students."

Since its inception, UCCP enrollment numbers have steadily increased—from 202 students in 1999–2000 to 1,935 students in fall 2003. But, the qualitative impact of UCCP in California can be best described by an e-mail sent from Jerry De Young of Riverbank High School in Fresno County:

We just received our AP scores for last year. Four students took Calculus, one passed; four students took Physics, two passed; one student took government, one passed. For our first year, I believe it was successful. This is four passes that would not have been possible without UCCP Online.

Coming Together: California State University–Dominguez Hills Establishes Support Group to Encourage Retention Among Latina Students

For the 28 percent Latina student body population at California State University–Dominguez Hills*, the Latinas Juntas program is just the type of networking event women on campus need in order to know who and what resources are available to them.

Started by two of the university’s clinical psychologists, Dr. Denna Sanchez and Dr. Monica Rosas-Baines, Latinas Juntas—literally meaning *Latinas Together*—aims to provide a forum where female students can come together and discuss issues relevant to their educational success such as graduation and retention.

Latinas Juntas aims to provide a forum where female students can come together and discuss issues relevant to their educational success, such as graduation and retention.

Sanchez and Rosas-Baines decided to start the program after attending last year’s Latina Connection Conference at CSU-Long Beach where they witnessed the fostering of networking opportunities between faculty and Latina students. “We both left feeling empowered, inspired and anxious to develop a similar program for our students here at CSUDH,” Sanchez says.

As psychologists working together on the campus, Sanchez and Rosas-Baines understood the need for students to feel connected as a means for educational success. They also are keenly aware of the variety of issues that can interfere with student retention such as academics, separation from family, relationships, financial issues, etc. However, they add, in addition to these typical issues, Latinas experience additional cultural demands. And, as Latinas themselves, Sanchez and Rosas-Baines could relate to the cultural and personal demands of many of their students.

On a campus where Latinas outnumber the men 2:1, they are often faced with unique pressures—especially if they are the first in their family to attend college or would like to go out of state to pursue another degree.

“It’s difficult for many of our students to negotiate the traditional values of their culture, such as family and clearly defined gender role expectations, and their desire for higher education,” Rosas-Baines says. “We give them the challenges and ask, ‘What can you do?’”

Adds Sanchez, “We give them support so they don’t feel alone.”

The one-day program, which was held earlier this month, promises to turn into an annual event. Besides the raffle prizes and book scholarships, the agenda includes five experiential workshops:

- Challenging students to take personal responsibility for their education
- Exploring the role of culture and family in their academic careers
- Actively engaging students in personal and interpersonal development
- Promoting self-awareness
- Acknowledging and celebrating the diversity of the Latina community
- Establishing a supportive network between Latina students, faculty and staff

Sanchez and Rosas-Baines also hope more mentors on the campus can help bridge the communication gap between students and faculty, because “good Latina faculty make good mentors.”

In addition to Latinas Juntas, CSUDH will be offering *Nosotras* (meaning *Like Us*), a weekly Latina support group where students can discuss their challenges as a group or individually.

“We want to leave them with something more... we want to help create a permanent supportive network between Latina students, faculty and staff,” Sanchez says.

**A Hispanic-serving institution and HACU member.*

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HACU Workshop Attendees

Engaging Latino Higher Education in the Developing Cyberinfrastructure: The California One Gigabit or Bust Initiative and Latinos

October 16, 2003 • HACU 17th Annual Conference, Anaheim, California

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