

Leveraging technology for learning in Latino families

Case studies from our Arizona,
California, and Colorado field sites

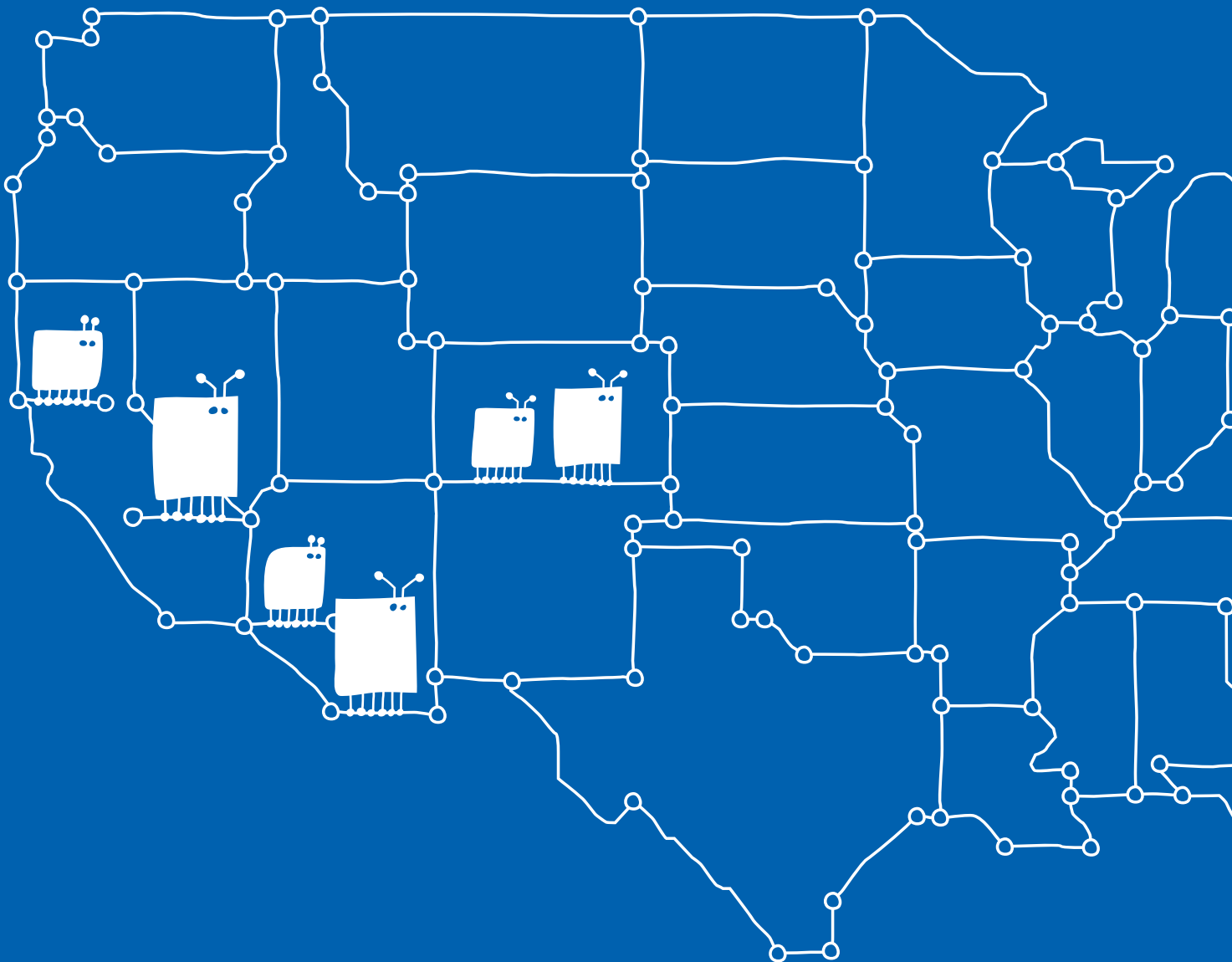
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The families profiled in the following pages are among the 170 that we interviewed in school districts located in Arizona, California, and Colorado between July 2013 and March 2015. Vikki Katz led a team of bilingual researchers in this effort, assisted by Carmen Gonzalez and Alexia Raynal. This research was funded by the Bill & Melinda Gates Foundation.

We have developed detailed reports of our findings from the 336 interviews we conducted with low-income, Mexican-heritage parents and their school-age children (grades K-8) in these three locations. We focused on the decisions they make about (1) adopting broadband and related technologies, and (2) how these technologies are integrated (or not) into a broad range of family routines and activities. You can find our reports, which include more details about our methodology and objectives, [here](#). And you can find results from our nationally representative survey of lower-income parents, which was informed by our interview findings, [here](#).

These six case study families are not meant to be representative of the 170 families we interviewed. They do, however, reflect the diversity and dynamism we found among interviewed parents and children in our three field sites. We provide their stories in order to showcase the complexity of how these low-income and immigrant families experience digital and social inequalities in their everyday lives. We consider these stories a good way to keep families' voices front and center in our research, since any summary of research findings—whether qualitative or quantitative—necessarily means aggregating families' responses.

oscar and david

Study site: Sunnyside, AZ
Household size: 5
Annual income: \$15,000-\$25,000
Parent (David): age 48, U.S.-born, high school graduate (in U.S.)
Child (Oscar): age 13, currently in 8th grade
Interview languages: English (David); English (Oscar)
Language(s) spoken at home: mainly English, but also Spanish

Oscar is a 13-year-old 8th grader who lives with his father, stepmother, and three younger siblings. Oscar's father, David, is a military veteran who was partially paralyzed during his service. Before he became disabled, David was an automotive mechanic and a construction worker. He is originally from Tucson and his wife is from Sonora, Mexico. David graduated from Sunnyside High School, the same school that Oscar is expected to attend after middle school. He has been living in the same neighborhood for 38 years and is proud of his community because everyone "takes care of each other."

Oscar's family has a lot of technology in their household. They have four laptops on loan from the children's schools, two personal laptops, three desktop computers, two iPads, and an Xbox 360. David tries to manage how much time the children spend going online at home. "I'm the one that has control over the Internet," he says. "I limit them to one hour of use a day, and if they do good in school, [if] they bring me good grades, they get more time." Oscar knows that the main rule is that the children have to complete their chores before using any devices. He also believes that having the Internet at home is great for his family because "everybody in the house uses it for a certain thing...my sister goes on Facebook, my dad video chats with people, my stepmom uses it to make long distance calls." He likes that they can communicate with family in Mexico through platforms like Skype and Google Chat.

David remembers first getting a computer and Internet service at home back in the 1990s, when he first needed to go online for work. His early experiences with the Internet were "terrible," because the technology was slow and unreliable: "It took forever to get something, man. A lot of static, and then sometimes the computer would go out. And the hackers...things that offer you something for free, there's a catch to it...that's what I teach my kids now." David's experiences with hacking and identity theft have made him very cautious about the Internet; this uneasiness is reflected in how he manages his children's online activity.

Oscar likes to play video games on his Xbox 360 Live; his dad keeps tabs on who he's playing with and how long he plays for. David understands that the Xbox is connected to the Internet and that Oscar talks with other players in different parts of the world.

In spite of these experiences, David does believe that the Internet is a useful tool that helps his children "investigate, communicate, and learn." David has noticed that since Oscar started using the school laptop and completing assignments online, his math and reading skills improved. Before, Oscar would get bored while doing homework, but now he "loves getting into the laptop and doing what he has to do...he's really changed," says David. Oscar also likes being able to use a computer during class because he can "go on websites and do different stuff, like watch videos."

With supporting their children's education as their primary motivation, David and his wife make sacrifices to give their children access to the Internet and new technologies. David constantly looks for special deals to maintain their home Internet connection; he has switched providers many times in search of the most affordable service. He does so because he wants his children to become "Internet-wise," so that they can have good career opportunities: "It's very important for them to learn nowadays, the new era of life; it's the Internet."



veronica and teresa

Leveraging technology for learning in Latino families:
Case studies

Study site: Sunnyside, AZ
Household size: 5
Annual income: less than \$15,000
Parent (Teresa): age 32, Mexican-born, completed some high school (in U.S.)
Child (Veronica): age 12, currently in 6th grade
Interview languages: Spanish (Teresa); English (Veronica)
Language(s) spoken at home: mainly Spanish, but also English

Veronica is a 12-year-old 6th grader who lives with her mother and three sisters. Veronica's mother, Teresa, works part time in childcare and is originally from Mexico. Teresa has been living in the United States for 15 years and her family has lived in their current neighborhood for five years. The family's three-bedroom home is located on the outskirts of Sunnyside, in a semi-rural area with unpaved roads. Teresa does not believe that this neighborhood is a good place to raise children, and hopes that she can relocate her family within the next few years.

While the family has had broadband Internet at home for five years, their provider options are limited by where they live. They have five Internet-enabled devices in the household: two school-provided laptops, two tablets, and one smartphone. When they first got Internet service at home, the family only had one desktop computer, and the girls had to take turns using it. "Each one had a half hour, and they could [only] use it after they did their homework," Teresa said. While she was not very familiar with computers at first, Teresa began exploring the Internet to look up recipes and find information about her daughters' schools.

Veronica and her sisters speak mostly English with each other, which makes Teresa uncomfortable because her own English skills are limited. Sometimes, Teresa feels like the girls speak in English when they don't want her to know what they are talking about. This same dynamic emerges when Teresa asks her daughters for help using the computer: "When I can't find a website, they take

the computer from me and do it themselves... I have to ask them to teach me [how to find it myself], and that's when they help me."

Teresa is both worried and impressed by her daughters' tech savviness. On the one hand, for example, they have figured out how to connect the laptop to the television, so that the whole family can watch Netflix together. But on the other hand, the girls have also found ways around Teresa's tech restrictions. Teresa recalls how Veronica once managed to get the neighbor's WiFi password after she had unplugged the router and put it away along with other devices. Because of her own limited tech experience, Teresa often feels like she is trying to keep up with her daughters.

Veronica describes how her mom often sits next to her on the couch when she's using her laptop. While she generally goes online independently, Veronica sometimes asks her mom for help with schoolwork, providing Teresa an opportunity to become more comfortable online: "Sometimes when I have homework on the computer, I ask my mom and she helps me—and she learns a little bit more."

Teresa is very grateful for the one-to-one laptop program in her daughters' school district. "For me, it is a big help. There are no libraries nearby, and I didn't have a car or a ride to take them to the library, so sometimes they would get frustrated... but now, they come home and do their homework here." When they are provided with laptops and Internet access, Teresa believes that children have no excuses for not doing their homework. Veronica also likes having the school laptop because she likes being able to go online for "cool projects," like researching ancient history or the Civil War. The laptop makes schoolwork easier, she feels, because "if you write it wrong, [the program] just fixes it for you. With paper, you have to get a dictionary."



melissa and linda

Leveraging technology for learning in Latino families:
Case studies

Study site: Chula Vista, CA
Household size: 5
Annual income: \$35,000-\$45,000
Parent (Linda): age 32, Mexican-born, high school graduate
Child (Melissa): age 8, currently in 4th grade
Interview languages: Spanish (Linda); English (Melissa)
Language(s) spoken at home: mainly Spanish, but also English

Melissa is an 8-year-old 4th grader who lives with her parents and two brothers. Melissa's mother, Linda, is currently unemployed and is originally from Tijuana, Mexico. Because of the proximity of the family's neighborhood to the U.S.-Mexico border, Linda travels between San Diego and Tijuana very often, and has resided in Tijuana for months at a time since moving to the U.S. Linda considers herself fully bilingual and seems proud of her ability to navigate cross-culturally with ease.

The family signed up for an offer from Melissa's school that allowed them to purchase a discounted refurbished desktop computer. The family had previously shared one computer that was kept in the boys' bedroom, so they purchased the second one for Melissa to keep in hers. For Melissa's mom, getting a second computer was a way to reduce squabbles among the children about sharing the device. Melissa appreciated that her school provided an opportunity to purchase another computer. She mentioned that her mom waited in line to get it, and she was happy she did so. The family had also tried to sign up for discounted broadband Internet through the Connect2Compete program, but learned that they did not qualify because they had outstanding debt with the provider.

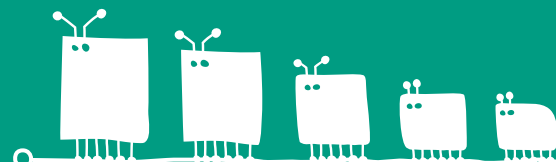
Linda believes that having Internet at home is a basic necessity, enabling her family to do everything, from "keeping in touch with other people, to making payments, to finding information related to the children's schooling." While she doesn't have much experience with computers, Linda feels confident navigating the Internet to

locate resources she needs, especially on her smartphone. In fact, as her 11-year-old son's math homework becomes more challenging, Linda often goes online to research ways that she can better assist him.

The family has two desktop computers, two smartphones, and one iPad that the children share. Melissa is very aware of the efforts that her parents have made to provide these devices for her and her brothers. Her parents often remind her that she needs to take care of them. Melissa remembers being reprimanded for not being careful recently: "My mom said that if I was going to be throwing the iPad on the desk, they [were] going to sell it. And now I know I am not supposed to do that. I cannot be throwing stuff around, like their iPhones, because they are important to [my parents]."

Melissa likes to play computer games with her brothers. They go on the Cool Math website and watch each other play games like Fire Boy and Water Girl. While Melissa knows how to access online games, she asks her parents or older brother for help when she needs to search for something. She feels confident using the family iPad on her own, and has also helped her dad learn how to use it to map directions and access Facebook.

In general, Melissa's family feels positively about new technologies and about using them as part of everyday life. Linda is confident that her rules limiting online access to certain hours and requesting her children to share devices with each other teach them lessons on how to best manage the time they spend with technology. She also appreciates how online platforms have made it easier to communicate with friends and family back in Mexico, particularly since they have to coordinate frequent visits to Tijuana.



angela and monica

Leveraging technology for learning in Latino families:
Case studies

Study site: Chula Vista, CA
Household size: 5
Annual income: over \$65,000
Parent (Monica): age 39, Mexican-born, completed some college (in U.S.)
Child (Angela): age 12, currently in 7th grade
Interview languages: English (Monica); English (Angela)
Language(s) spoken at home: mainly English, but also Spanish

Angela is a 12-year-old 7th grader who lives with her parents, older sister, and younger brother. Both of Angela's parents work for the U.S. military. Monica, her mother, was born in Tijuana, Mexico, but was raised in the U.S. and has lived in Chula Vista for 15 years. While she believes her neighborhood is a good place to raise children, Monica has concerns about recent crime and drug activity in the area.

Angela's dad does not speak much Spanish, and therefore the family speaks mostly English at home. Monica, however, makes an effort to speak Spanish with her children to help them practice. Angela likes watching Mexican television shows and old movies in Spanish with her mom: "I just sit down with her on the couch and we cuddle under a blanket and watch those movies. I'll try to figure out what they mean...and she'll be telling me what they're saying."

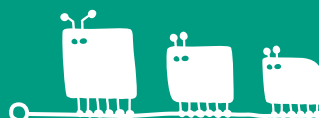
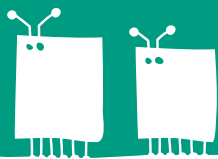
The family has had Internet access at home for many years, and they currently have two desktop computers, three laptops (one of which belongs to Angela), three different video game systems, and various mobile devices. One of the desktop computers was recently purchased through an offer from Angela's school. Monica and her husband decided to buy the refurbished computer to have a designated "kids' computer" at home. Monica thinks that it is important for her children to "get more comfortable using the computer, and at the same time, strengthen their skills."

Monica also wanted to sign up for discounted Internet through Connect2Compete, but learned that the family was ineligible because they already had Internet service at home. She appreciates the school's efforts to make technology more accessible: "I know some parents wouldn't be able to afford [computers and the Internet], so for [the schools] to have this program, I have to shake each and every one of their hands."

Monica communicates openly with her children about how they use technology at school and at home. She frequently asks them what they are learning at school and what websites or games they like to use there. But it is sometimes difficult for Monica to distinguish between recreational and educational activities: "Sometimes I'll think that my daughter is on her phone playing, and I tell her, 'You're supposed to be doing your homework'...then I'll look, and sure enough, she's doing research." Monica knows that her children's teachers ask them to use websites or apps for their homework, and she likes to stay on top of their online activity.

The family also regularly uses technology together. They like to watch biographies and cooking shows on TV, and sometimes go online together. Monica says that technology "definitely helps me when my kids are interested in something that I don't have the answer to; it's at my fingertips."

While Monica does have some concerns about online predators, she generally allows her children to navigate the Internet without direct supervision. Because she is confident in her own technological skills, she feels capable guiding her children's technology use. Monica's husband is a technician, and Angela refers to her father as a "computer whiz." Together, Monica and her husband talk to their children about viruses, pop-up ads, and safe social media practices. Angela appreciates this guidance, and feels that her parents have taught her how to go online without getting "distracted by those little things, those little ads and stuff like that."



cynthia and angelica

Leveraging technology for learning in Latino families:
Case studies

Study site: Denver, CO
Household size: 3
Annual income: less than \$15,000
Parent (Angelica): age 42, Mexican-born, completed 8th grade (in Mexico)
Child (Cynthia): age 9, currently in 4th grade
Interview languages: Spanish (Angelica); Spanish (Cynthia)
Language(s) spoken at home: mainly Spanish, but also English

Cynthia is a 9-year-old 4th grader who lives with her parents. She has half-siblings who live in Mexico and with whom she keeps in touch often through Facebook and video chats. Cynthia's father works in landscaping, and her mother, Angelica, typically works as a housekeeper but is currently unemployed. Angelica is originally from Mexico and has been living in the U.S. for 11 years; the family used to live in California but moved to Denver six years ago. Angelica and her husband speak mostly Spanish, but Cynthia has been teaching them more English over the years.

The family first got a computer and Internet access at home about eighteen months prior to our interview. Angelica signed up for the Internet Essentials program offered through Cynthia's school, which provides broadband Internet service for \$9.95 per month. In order to afford the Internet, the family had to cancel their cable service. The decision to acquire a computer was prompted by Cynthia's grandmother in Mexico, who wanted to see her son, rather than just talk to him, during his protracted recovery from a serious injury. All of Cynthia's relatives are in Mexico and California, so using the internet to keep in touch is very important.

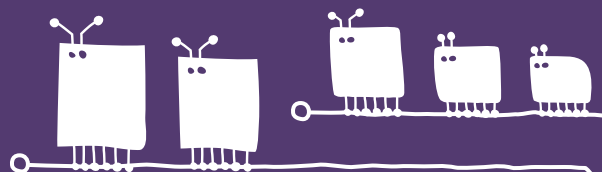
Angelica is not very familiar with computers, so she often asks Cynthia to help her look for things online. She is more comfortable going online on a tablet, "because they are smaller and you can take them with you." Since she is diabetic, Angelica frequently uses the web to look for healthy recipes.

When she has trouble finding recipes in Spanish, she asks Cynthia to translate them for her. Angelica also frequently uses the Whatsapp and Facebook apps on her smartphone to send photos and have conversations with her friends and relatives in Mexico.

The family has a laptop, an iPad, a tablet, and two smartphones. When Cynthia goes online, she likes to watch Barbie videos on YouTube and a Spanish telenovela for kids called *¡Vivan los niños!*. Cynthia describes clear rules for technology use at home: only half an hour at a time on any device, no eating while using the devices, and informing parents about any viruses or problems. She talks with her parents about her online activity: "They said they have to help me so that I don't get into problems that could hurt my family, like applications that ask for your identity."

While she has access to a variety of devices at home, Cynthia often prefers reading books, either by herself or with her parents. "My books help me with homework and they can transport me to places when I feel sad," she says. She also prefers written school assignments over those that involve using a computer or going online: "If I make a mistake, I can fix it myself; it's different when the computer fixes it for you." Angelica has also observed her daughter's preferences: "There are very few shows that she watches on television; she still likes to play with her toys and prefers to be outside playing, so I don't worry too much about how much time she is spending with technology."

Since Cynthia's schoolwork is now mostly in English and requires more computer use, Angelica wants to further develop her own language and tech skills to continue helping her daughter with her homework. She has started using online translation services to make sure that she understands Cynthia's assignments.



erica and denise

Leveraging technology for learning in Latino families:
Case studies

Study site: Denver, CO
Household size: 5
Annual income: less than \$15,000
Parent (Denise): age 30, U.S.-born, completed some college (in U.S.)
Child (Erica): age 8, currently in 3rd grade
Interview languages: English (Denise); Spanish (Erica)
Language(s) spoken at home: equal amounts of Spanish and English

Erica is an 8-year-old 3rd grader who lives with her mother, older sister, and grandparents. Erica and her mother, Denise, are fluent in both English and Spanish. Erica has an impressive command of both languages—her Spanish-language skills are reinforced at school through a dual-language immersion program, and at home through conversations with her grandparents. The family also travels to Mexico about four times a year, where Erica spends time with her cousins, strengthening her language skills in the process.

Denise remembers getting a computer and Internet service for the first time about nine years ago, when completing her GED required being online. Now, her family has two desktops, four laptops, four tablets, four iPods, and three smartphones. Denise made the decision to forgo cable service, as she feels that Internet service is more important and provides the family with ample viewing options: “The kids usually YouTube movies if they want to see them or something, which is much cheaper than cable.” She also believes in purchasing used items rather than new ones, including electronics, as a way to save money.

Erica currently uses computers for schoolwork only occasionally, either at school or at home. She does feel that her tablet helps her learn about different topics, but in general she prefers writing on paper, because hand writing helps her with her spelling. She often uses her tablet to play games like Minecraft and Pacman; she also uses it to watch funny YouTube videos with her sister

and cousin. Erica also uses the computer to play math games, but does not seem to engage with educational media very often.

Erica generally engages with technology independently, as do her family members. She only asks her sister for help when she has trouble accessing an app or a website. Denise is also very comfortable with technology, and rarely has to ask her daughters for tech-related help. She sees Google as a very important resource for her family. When her daughters ask questions, she feels confident that she can find an answer online. She finds this particularly useful when helping Erica with her homework: “There are things that she is learning that I completely space out on, so I’ll look at her and she’ll be like, ‘Help me,’ and I’ll say, ‘I don’t even remember how we did that.’ So I’ll get online and look it up, and oh yeah, I remember.”

Denise likes to watch television shows on networks like the History Channel or Discovery, and she encourages her daughters to watch with her. She feels proud when her daughters encounter topics in class that they first learned about at home. Denise feels that television programs can inspire curiosity: “I always make them watch different history movies. If they don’t want to read about it at first, they can watch it, and then that actually makes them read more about it.”

While she is optimistic of the educational value of television, Denise worries about how her daughters are using technology at school. She worries that having Internet access during class time is distracting, because she feels students will inevitably look for content unrelated to what they are learning. She is also concerned that instant access to information reduces children’s problem-solving skills, and worries that completing assignments online can make it difficult for teachers to determine if their students are submitting original work.

