Hope for a Struggling Rural Community Starts at a Small High School in the Desert

"We don't have to build a mansion. We just want to build something affordable."

—Matthew Collins, student in the Loving High School construction trades program

Microsoft

High School "Contractors" Learning to Rebuild Their Rural Community

Geographic remoteness, the flight of young people to urban centers, and high poverty rates threaten the future of many rural towns. To counter this trend, the state of New Mexico and Microsoft are exploring ways that rural schools can excite students about learning, better prepare them for the workplace, and help catalyze local economic development. In the town of Loving, high school students are learning construction trades and putting those skills to work building affordable housing that can help rejuvenate their community.

Growing up in tiny Loving, New Mexico, Matthew Collins saw few career options after high school. "I have family that works on the drilling rigs; I probably would have ended up working with them," the 17-year-old says. "It's usually rough, really physical, and you're in the sun all day." He was not looking forward to the prospect. And now he might not have to.

Matthew and a number of his Loving High School classmates are preparing to build a brighter future, not only for themselves but also for their rural hamlet—one home at a time. They are part of a unique partnership between Microsoft, the New Mexico Office of the Governor and the state Public Education Department—through the latter's Rural Revitalization Initiative—to develop innovative education and technology solutions that also support economic development in rural communities.

Loving's plan is at once simple and ambitious. Starting in the fall of 2008, 24 high school juniors and seniors, supervised by two building trades teachers, will begin construction on a new, energy-efficient home. Over the school year, they will pour the foundation, frame in the walls, install plumbing and electrical lines, put up drywall, lay down the roof, nail up siding and then paint the new home inside and out. Students also will learn how to use Microsoft computer applications, such as Microsoft Office Visio and Microsoft Office Project, to manage all aspects of the construction project.

These students are poised to become part of the solution to a growing challenge: keeping America's small towns vibrant as they face an array of socioeconomic challenges and as young people, unable to find good jobs, are drawn to distant urban centers. The problem is particularly acute in New Mexico, which, according to a recent study by the Rural School and Community Trust, ranks first among the 50 states in rural poverty and second, behind Mississippi, across a range of urgent challenges faced by rural school districts, including ethnic diversity and geographic remoteness of rural communities.

To help address these challenges, Microsoft, through its flagship education initiative, Partners in Learning, is contributing up to $2 million in funding and a dedicated Microsoft employee to work with New Mexico's Office of the Governor and the state's education department to help several rural school districts—including Loving—to create new opportunities for their young people while simultaneously strengthening their local communities.

Partners in Learning is a 10-year, $500 million commitment by Microsoft to collaborate with schools worldwide to create more suc-

Fast Facts

Organization:
Loving Municipal Schools
Loving, New Mexico
www.lovingschools.com

Program:
A course of study that guides high school students in this small farming community toward careers in the construction trades and provides opportunities for them to learn business and computer skills.

Profile:
Students who likely would not have gone to college receive hands-on training in carpentry, plumbing, electrical contracting, computers and architecture. Because they also receive college credits, increasing numbers of this town's young people now look forward to college and careers as skilled contractors and subcontractors.

Program Impact:
School and community leaders believe that this program will not only provide a new generation of skilled craftspeople the region now lacks, but that it also will strengthen the local community by creating affordable housing and helping a new middle class bolster the small town's economic future.

Loving High School students work on a house in nearby Carlsbad as part of the school's new construction trades program.

cessful learning environments, enable professional development and greater collaboration among educators, and integrate technology effectively into teaching and learning.

"The innovative programs in Loving and other New Mexico communities offer exciting hands-on learning opportunities for students," says Anthony Salcito, general manager for education in the Microsoft Public Education Group. "Importantly, they also are putting a renewed classroom focus on science, technology, math and entrepreneurship that will help prepare students for today's workplace—while also helping bring new and sustainable economic development to New Mexico's rural communities."

In addition to the construction-based curriculum in high schools, Microsoft is also supporting other innovative initiatives in New Mexico schools:

- A Media Entrepreneurs project in the high plains village of Mosquero, in which students host their county's Web site and publish its quarterly newspaper; provide photo restoration, videotaping of community events, and graphic design work; and videotape oral-history interviews with community elders.
- Expanding a campus greenhouse in Fort Sumner Municipal Schools and turning it into a commercial venture by growing and selling cacti, bedding plants and gardening products.
- Training students in film production through a consortium of seven small school districts in the northeastern part of the state.

Taking Control of Their Destiny

Loving's current-day challenges became apparent in the 1980s, when the declining population—due largely to the introduction of mechanized farming in the area—led to the loss of the town's three grocery stores and other commercial businesses. Loving seemed destined to become another Western ghost town.

At the same time, Loving's teenagers, who attended a large high school in nearby Carlsbad, were struggling. About one-third dropped out before graduation. Parents in Loving believed that part of the solution was to build their own high school, a place that could become a focal point for learning and a resource for the community. Loving High School was completed in 1989, and today, more than half of graduating seniors go on to college, according to David Chavez, superintendent of Loving Municipal Schools. "But for the 49 percent who are not going on to college, we realized that those students really didn't have the marketable skills to compete for jobs," he says.

To address the needs of this segment of the student population, the high school implemented five specialized curricular tracks: Architecture and Construction; Health Sciences; Business; Agriculture Sciences; and Science, Technology, Engineering and Mathematics. In Architecture and Construction, for example, students take core classes in carpentry, drafting, plumbing and other contractor-oriented subjects. These classes are augmented with other practical coursework in business, computing and math.

"A carpenter's skill set is completely different now than it was when I went to school," says Chavez. "Now, carpenters and plumbers and electricians need to understand computers, technical math, technical writing."

When it comes to building the new home, "we're planning for the kids to do 100 percent of the work," says Doug Santo, who, along with Brigido Garcia, teaches construction skills at Loving High School. "But they'll also get to work with journeyman electricians, plumbers and carpenters who'll check everything they do."

Students at Loving High School are learning multiple facets of the construction industry, from pouring concrete to using computers to manage project schedules and budgets.

"With the resources that Microsoft has provided, this program is going to take these kids a long way. It's not even about the money; it's the doors of opportunity that Microsoft has opened by broadening our students' access to computer programs and helping guide us toward other partners who have stepped up to help with this program."

—Doug Santo,
construction trades teacher
at Loving High School

Learning these skills, community leaders say, will enable participating students to become part of a new generation of craftspeople and general contractors that southeastern New Mexico desperately needs. The hope is that the program will also solidify schools as a cornerstone of sustainable socioeconomic development in rural communities.

"If a school closes, its community dries up," says Jim Holloway, assistant secretary and rural specialist with the state education department. "You only have to ride through communities where they've lost their schools to see what happens. There's not much to hold people when the school is gone."

Changing Young Lives and Inventing Careers

Along with the hammering, sawing and drilling, students in the program will work with an architect on the plans and with local bankers on the financing. They will need to perform like any other general contractor, carefully scheduling subcontractors and meeting construction deadlines in order to convince the Western Commerce Bank in Carlsbad to release funds at various stages of the project.

The New Mexico legislature provided $146,000 to help purchase land for home sites in Loving. As part of the Partners in Learning investment, cash and software totaling $135,000 will go to the Loving Municipal Schools. This funding will help the school district purchase equipment and provide additional training for teachers so they can certify students for specific classroom work and for the practical aspects of the project once construction begins in the fall. In addition, the donated software will be incorporated into the high school curriculum. Visio Professional, a computer-assisted drawing application, will help students and their teachers create blueprints. Project Professional will help with the development of timelines for plotting construction progress, managing subcontractors' schedules and tracking construction draws from the bank.

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For example, through a partnership with New Mexico State University at Carlsbad, students participating in the Architecture and Construction track also have the opportunity to earn up to 24 college credits while earning their high school credits.

"The program will help me get started in college earlier," says Victor Gonzalez, 17, a junior. "I want to keep going, get into carpentry. My family wants me to keep pursuing this because it's a good career and it's rewarding, money-wise. Eventually I want to either be a contractor or an architect."

Once the first home sells, the school will invest the returns in other construction projects, creating a self-sustaining program for students. The homes, which will be priced affordably in the $125,000 to $150,000 range, will also help the community nurture a middle-class population.

"Loving needs new homes," says Don Kidd, president of Western Commerce Bank. "If half of these students learn to be carpenters, plumbers, electricians—and one of them becomes a full-fledged contractor—I think this program will be a tremendous success."

Kidd was so impressed with the program's inventiveness that his bank is financing the construction with a no-interest loan. "How often," he asks, "do you get to help young people find good careers, spur housing development and strengthen the local economy—all at the same time?"

Along with providing an opportunity to build new houses, the program is also raising students' awareness of their own capabilities and the role they can play in helping Loving thrive.

"We don't have to build a mansion," Matthew Collins says. "We just want to build something affordable."

Matthew is not the only person who's glad he discovered Santo's carpentry class. "I think my mom is really happy that I've chosen a career, that I know where I want to go," he says. "I wasn't going to go to college. But this program changed my mind."

Microsoft Unlimited Potential

In 2007, Microsoft launched Unlimited Potential, which brings together the company's corporate citizenship efforts and many of its business investments to significantly broaden the reach of technology in underserved communities. Unlimited Potential aims to deliver the benefits of relevant, accessible and affordable software to the 5 billion people who today have no access to technology or the opportunities it affords, with a goal of reaching the next 1 billion people by 2015.

For more information, visit ***www.microsoft.com/unlimitedpotential***

To learn more about Microsoft citizenship programs and investments, visit ***www.microsoft.com/citizenship***

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