

"OUR GOALS ARE TWOFOLD -- TO GET TECHNOLOGY INTO OUR STUDENTS' HANDS, AND TO KEEP TECHNOLOGY OUT OF OUR LANDFILLS."

The Oakland Technology Exchange (OTX) in Oakland, California collects, recycles, and distributes donated computers for student use. Begun in 1992 by Bruce Buckelew, a retired IBM engineer, OTX now has two sites and has refurbished over 8,000 computers for Oakland schools and low-income households, slowly expanding over the years to the point where it now operates much like a private-sector business. The program teaches students and community volunteers technical skills while supplying schools with much-needed technology -- all at a extremely affordable price.



"New machines can easily cost between \$1,500 and \$3,000 for the hardware alone," said Bruce Buckelew, founder and Director of OTX. "A recycled computer, loaded with appropriate, legal software, can be provided to a school for well under 100 US dollars."

Sponsored by the Marcus A. Foster Educational Institute (MAFEI) and working closely with the Oakland Unified School District (OUSD), OTX's home computer program is offered to all high school students and will expand to middle schools in 2002. In order to receive a home computer, students and one adult must attend a 3-hour training session at their school. OTX partners with MAFEI to administer these sessions that are held at the school sites and in multiple languages. An evaluation of the take-home program indicated that up to 82% percent of the computers were being used by at least one family member for homework, and nearly 80% of the parents or guardians reported seeing a positive change in their child's achievement level as a result of using the computer for schoolwork. The complete report is available at: <http://ns1.californiaschools.net/~ud/year3/parentsurvey.htm>



OTX volunteers clean, refurbish, and distribute computers to school computer labs. In addition to numerous individuals wanting to get rid of old computers, OTX receives hundreds of machines from corporate sponsors when they upgrade their internal networks. "Our goals are twofold: to get technology into our students' hands, and to keep technology out of our landfills," says Bruce.

Volunteers don't need computer skills to serve at OTX because much of the work needed is to sort and clean equipment before it goes out the door. The first OTX site is based at Oakland Technical High School, and works with almost a hundred students on a work-study basis. The second OTX site works with a local job-training program and volunteers for its technical work, drawing upon hundreds of other students and adults that want to serve their community for non-technical tasks.

Computers are refurbished using standardized software images that OTX and the school district have worked on closely together, ensuring it works well within the district's computing infrastructure. This is essential for a cash-strapped school district, with more than 50,000 students at over 100 locations. "We get plenty of hefty machines donated to us all the time, that we are using to build our backbone servers" says Chris Nicholas, a former Sun Microsystems engineer and OTX technical volunteer. Using primarily open-source software, Nicholas says "we are building a manageable, enterprise-class teaching platform for tens of thousands if users, not an administration nightmare."



For more information about the Oakland Technology Exchange program, please visit: www.otxwest.org, email otxwest@yahoo.com, or call 510-893-4822.