



SKILLS DEVELOPMENT THROUGH COMMUNITY COMPUTING: THE IRONDALE COMMUNITY COMPUTER LAB

Elizabeth Dunn and J. Gordon Arbuckle, Jr.

AUGUST 2002



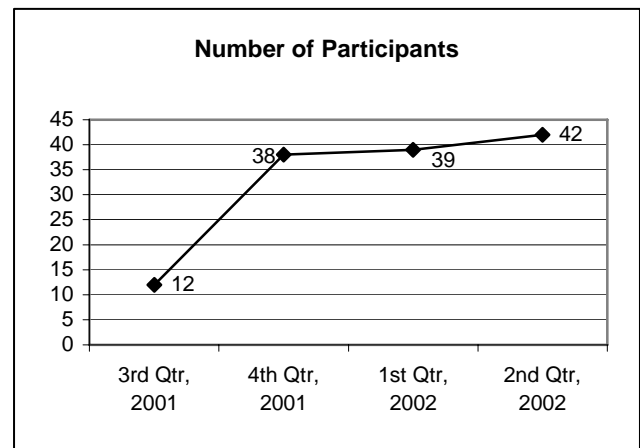
The full report of the *Skills Development Through Community Computing* can be found at: <http://outreach.missouri.edu/fcrp/evaluation/finalirondalereport.doc>.

The Irondale Community Computer Lab (ICCL) provides the children, youth, and adults of Irondale, Missouri, with access to computers, access to the Internet, and assistance with information technology. Funded by the USDA's Children, Youth, and Families At Risk (CYFAR) program, the ICCL's main goal is to help Irondale (population 437) residents learn computer and information technology skills.

The program has been successful. Since it opened in September 2001, lab attendance has grown from 12 people in the first three months of operation to 42 people in April, May, and June of 2002 (see figure below). Not only is the ICCL serving large numbers of Irondale residents, it is also meeting its goal of improving their computer skills. A recent assessment found that people who had attended the lab for at least six months showed significant improvements in their skills.

IRONDALE COMMUNITY COMPUTER LAB

The ICCL is a collaborative project of University Outreach and Extension, the Big River Community Information Network, and the Irondale City Council. The lab is in the Irondale City Hall and is open five days a week, with both daytime and evening hours. There are five up-to-date computers, four of which are connected to the Internet. Volunteers from Irondale and the Big River Community Information Network run the lab. These volunteers, along with University Outreach and Extension staff, provide tutoring and guidance to lab participants.



MEASURING CHANGES IN COMPUTER SKILLS

The ICCL helps Irondale residents learn computer skills through hands-on use, informal tutoring from volunteer technical staff, interaction with other computer users, and on-line training. This study measures the impact of the ICCL on participants' computer skills.

To measure changes in their skills, participants were asked to demonstrate their abilities to do tasks in four common areas:

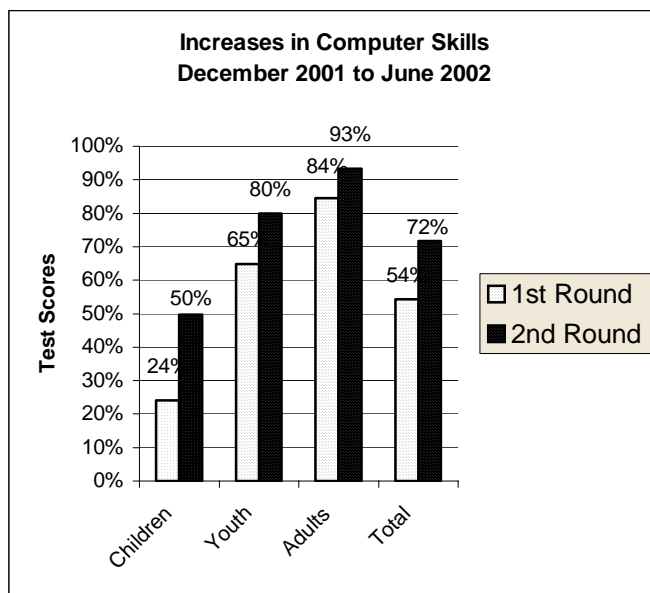
- General operation of the computer,

- Word processing,
- Using the World Wide Web, and
- Electronic mail.

The test started with very basic tasks, such as turning on the computer and opening a file, and progressed to more difficult tasks, such as advanced document formatting and navigating folders. A trained evaluator read the test to the participant, asking the participant to complete 96 possible tasks. Each participant was then assigned a score based on the percentage of tasks completed correctly. Participants' computer skills were measured twice over a six-month period to see if there were any changes. The first test was given in December 2001, and the second test was in June 2002. Fourteen participants took the first test, and 42 took the second test.

IMPACTS ON COMPUTER SKILLS

The results showed that the ICCL has a positive impact on the people who come to the lab, based on improvements in their test scores. Although 42 people took the test in the second round, this report is based only on scores from the 14 people who took the test twice. These are the people who had used the computer lab for at least six months. There were six children, three youth, and five adults. Average scores from the first test were compared to average scores on the second test using statistical analysis techniques (t-tests).



Lab participants improved their computer skills over the six-month period between December and June. As shown in the figure at the left, the average score for the group as a whole went from 54 to 72 percent. Children in particular appear to gain most from exposure to computers and informal help from volunteers. Children who took both tests were able to do twice as many tasks in June as they had in December, more than doubling their average scores from 24 to 50 percent. Average scores for youth went from 65 to 80 percent, which is an increase of 23 percent from where they started (i.e., a 23 percent increase over the base score of 65 percent). Adults' average scores went

from 84 to 93 percent, which is about an 11 percent increase from where they started.

COMMUNITY COMPUTING CAN MAKE A DIFFERENCE

The study shows that community computing can have a positive impact on participants' computer skills. Even without formal on-site training programs, the ICCL appears to be helping community members of all ages improve their computer and Internet skills. The Irondale Community Computer Lab is making a difference in the lives of the children, youth, and adults of Irondale, Missouri, and narrowing the digital divide for residents of this small town. The ICCL can serve as a successful model for other programs to develop technology skills through community computing.

The New Communities Projects (NCPs) and this evaluation are funded by a five-year grant from the Children, Youth, and Families at Risk (CYFAR) National Initiative of CSREES-USDA. University Outreach and Extension (UOE) of the University of Missouri administer the grant through the Family and Community Resource Program (FCRP). UOE Outreach Development Funds provide additional funding for this work. Information about CYFAR, the NCPs, and FCRP's programming with at-risk populations can be found at <http://outreach.missouri.edu/ferp>. Contact Elizabeth Dunn at DunnE@missouri.edu with questions about this evaluation and Lynna Lawson at LawsonL@missouri.edu with questions about the program.