

Youth Fair Chance Final Report

by

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15-499 B

Computer Science in the Community

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I. Introduction

My name is Ira Fay, I am a sophomore in Computer Science at Carnegie Mellon University. I've helped numerous people with basic computer skills, including my family and friends, as well as my boss over winter break. Furthermore, I have reasonably well developed communication skills and I enjoy helping others. As a Student Community Technology Consultant, my role in assisting my community partner was to provide support that would be permanent; instead of simply fixing the problems as they arose, I would teach the skills necessary to solve those problems. In that way, even after I had left, the positive benefits would remain.

I chose to enroll in the course 15-499 Computer Science in the Community because of the opportunities I anticipated it would provide me – to increase my communication and project management skills, to help others, to satisfy my elective requirement with a productive and enjoyable course, to get amazing real-world experience.

My Community Partner, or the person with whom I worked, was Darlene Lane, Office Manager of Youth Fair Chance (YFC.) Most of my time was spent teaching her the necessary skills to deal with, use, and conquer computers. We met twice a week for two hours at YFC. I worked with Darlene for several reasons. Since there is no computer lab supervisor, Darlene inherited the responsibility to care for the lab, so her computer ability was important. Furthermore, Darlene had the time to learn from me. Finally, Darlene had the *desire* to learn, which is probably the strongest reason why I imparted most of my computer knowledge to her.

Many other individuals were also involved with the computers; their relationships and interactions will be described later in this report.

II. Profile of the Technology Program

Background

The background of Youth Fair Chance is complex and I doubt that any one person can relate the entire story. Nonetheless, I will try to convey the knowledge that I have gained through my experiences, questions, and observations during my time at YFC. Perhaps through a

greater understanding of YFC's past, the reader will better be able to understand the present and predict the future.

Note that several names are mentioned in the following history. The people, their positions, and how they relate will be elucidated in greater detail in the Program Staff section below.

Youth Fair Chance, located at 2851 Bedford Avenue in Building 3, was established in 1990 by a Department of Labor grant, which was intended to last for five years. YFC was originally established as a community center for "at-risk" youth, where "at-risk" included those who lived in high poverty or high crime areas. In addition, YFC tried to be a safe haven or "drop in" center where a youth could simply "drop in" and participate in the current activity.

Youth Fair Chance conducted numerous and varying programs during its first five years; some programs were successful, some were not. For instance, Saturday academy, which tried to teach students basic reading and writing skills, had a very low turnout. On the other hand, an aerobics class was quite successful. For more details about YFC's past activities, I encourage the reader to explore <http://hillhouse.ckp.edu/~yfc/activities.html>.

One important event which introduced computers to YFC were YFC's RFPs, or requests for proposals. Youth Fair Chance had money to spend on programs, and they solicited ideas from local groups. In 1994, the Boys and Girls Club proposed a challenge program, focused on sports and recreation, which used computer to teach sports. This program was accepted by YFC, and computers were purchased. Though these computers are different from the ones used by YFC today, I think this event initiated YFC into the world of computers.

YFC continued mostly unchanged (as a "drop in" center which ran programs) until January of 1995, at which time Stephen MacIsaac was contracted by the city of Pittsburgh to manage YFC. By this time in YFC's development, money was getting tighter and programs were being cut. Mr. MacIsaac recognized the national push for School-to-Work programs, and therefore worked to develop a School-to-Work program for YFC.

Kellin Strong, the Program Coordinator for YFC at the time, implemented the School-to-Work program, which soon became the primary program provided by YFC. During the Winter and Spring of 1996, a pilot School-to-Work program was tested with 20 students. The School-to-Work program blossomed, and it continued the following summer with 50-60 students.

The idea underlying the School-to-Work program is that the students go to local businesses and do regular work, while YFC pays the students' wages and insurance. In this way, the companies get good, free labor, and the students get vital work experience. The School-to-Work program will be explained in greater detail below in the Program Offering section.

With the development of the School-to-Work program, YFC decided to fill their computer lab with computers, which arrived in March of 1995. This purchase marks the beginning of YFC's significant computer involvement, and also represents the ancestors of the computers that I worked with during my project.

With the changes proposed by Mr. MacIsaac and implemented by Mr. Strong, by early 1995 Youth Fair Chance was focusing primarily on the School-to-Work program, which focused solely on students in school. Therefore, the building was practically used during the day while the students were in class. The city of Pittsburgh saw this inefficiency, and in April of 1995, the Young Fathers (YF) program arrives to Building 3, the home of YFC.

Though the focus of my project was not the Young Fathers (YF) program, the reader must understand their relationship to YFC to have a complete understanding of the current situation. The YF program attempts to provide fathers 18 years old or younger with an ability to get their GED, as well as an ability to get and hold a job. In addition to sharing the building with YFC, the YF program also shares the computer lab. Greater detail will be provided below.

Focusing on the computers, two people were hired in 1996 to hold open lab hours and to teach a six week course on Microsoft Word, which was open to the general public with target ages of 14-30. Due to budget and perhaps other constraints, they were no longer employed by YFC after the computer course ended.

Due to a desire for greater computer expertise in the School-to-Work program, Pomona Valero was hired in the Fall of 1997 to serve as a computer teacher and special projects organizer for the School-to-Work program. I will elaborate further in the sections to follow.

Furthermore, a pilot program, the Urban Youth Talent Pool (UYTP) program, is now being introduced at YFC. Again, I will elaborate in greater detail below.

Finally, in January of 1998, an Interim Director of YFC was appointed to serve until June 1998, when the funding from the Department of Labor will be entirely depleted. Note, though, that YFC made the original five years of funding last for eight. In addition to the Interim

Director, YFC also now has a Management Team, as well as a Community Advisory Resource Board.

Program Offering

The primary program offered at YFC is the School-to-Work program, which contains three parts:

- 1) Classroom instruction to improve employment desirability – students ages 14 - 18 write resumes and cover letters, as well as improve their interviewing skills.
- 2) Tutoring – since the students are working as well as taking classes, each youth gets special tutoring for their schoolwork to ensure that his or her grades do not drop.
- 3) Computer Lab – in the computer lab, the students do the following activities:
 - a) Word processing – type resumes and cover letters.
 - b) Basic Computer Familiarity – make business cards; learn how to use Microsoft Access; create and complete special, group projects such as a publishable calendar or cookbook.
 - c) Internet familiarity – search for recipes on the World Wide Web (WWW), post profiles for the Urban Youth Talent Pool program (described below), or general exploration of the WWW.

Obviously, the computers and Internet access are extensively used in the third part of the School-to-Work program, and are vital for the program's success.

The specific computer-related aspects of the School-to-Work program that I think deserve highlighting are the special projects organized by Pomona. Not only do these projects develop basic computer skills by teaching the students how to use certain programs, the projects also encourage teamwork and create a concrete end product for which everyone involved can be proud. This key part of the program will arise later in relation to Internet connectivity.

Another program that makes use of the computers and the Internet is the Urban Youth Talent Pool (UYTP) program. UYTP is a collaborative program with the Community Literacy Center and Carnegie Mellon's Center for University Outreach. UYTP's purpose is to encourage teens and adults working together to explore the culture of work, to better understand and communicate the teens' experiences and achievements, and to build feasible plans for satisfying

future employment. The students use special software installed in the computers to build profiles about themselves, which are then publicly displayed on the Internet to allow easy and universal access to the information.

YFC, and specifically Darlene and her newly-hired assistant, are also coordinating the YouthWorks program. YFC accepts summer job applications from students, reviews the applications to ensure that they are complete, and redirects the applications to city government. YFC within the YouthWorks program then follows up on the paperwork to guarantee that the applications are moving through the system, with the hope that the city will accept the application and place the student in a summer job.

Though not directly related to YFC, the Young Fathers program does use the computers in the lab, and should therefore be mentioned here. Approximately 80% of the fathers in the YF program need to get their GEDs, so they use software installed on the computers to practice the test. The fathers also use the computers for word processing (creating resumes and letters), job searching on the Internet, and games (chess, golf, skiing, etc.) during recreational time.

Program Staff

The web of people relating to YFC is massive and complex. Below, I will attempt to list all the people, along with their title and functions, who relate in some approximately direct way to YFC and its function:

Darlene Lane, Office Manager of Youth Fair Chance; Community Partner; I worked with Darlene the great majority of my time; she started with negligible computer knowledge and has now learned the basics (File system basics, several applications, Internet basics.)

Ronele Thomas, Recreation Leader for YFC; she started with passable computer skills (basic applications, saving to a disk); I helped Ronele with brief troubleshooting, but we did not work together for any extended time.

Charlotte McDonald, School-to-Work Coordinator for YFC; I did not work with Charlotte.

Vaunda Thornton, AmeriCorp Volunteer assisting School-to-Work for YFC; I did not work with Vaunda.

Pomona Valero, Clusters Services Manager (Graphic Arts / Computer Lab consultant) for YFC; with great skill, she creates, guides, and organizes all the special projects put together by

the students in the School-to-Work program; Pomona has superior computer knowledge compared to me, and is employed by CMU, as well as by YFC; when the Internet connection could not be established by either myself or Carl Redwood (below), Pomona called a friend who got all the computers online in a few hours.

Jeanine Johnson, YouthWorks Outreach Intake Assistant; I did not work with Jeanine.

Kellin Strong, Program Coordinator of YF, previous Program Coordinator of YFC; Kellin uses his computer as a shelf and has practically no knowledge of how computers work; whether or not he has an interest to learn more is insignificant in practice, since he has no additional time to learn, and training money and resources are scarce.

Mary Bray, Office Manager for YF; though worked with Mary only briefly, I know that she only uses her computer for word processing; with the appropriate computer training, I am confident that she could learn a great deal more; she was interested in exploring the possibility of upgrading her computer from Windows 3.1 to Windows 95, but her computer was too old (and no money was available to upgrade) and she had no time to devote to learning the new system.

Dave Eyrich, Math Instructor / Job Developer for YF; Dave had basic computer knowledge including word processing and Internet exploration; even though he was not part of YFC, I tried to answer his questions and help him when possible; given time and a teacher, I am confident Dave could learn lots more.

Malcolm Thomas, Language Instructor for YF; Malcolm was relatively proficient with the computer, and I did no more than briefly observe him work.

Myrna Sumpter, Interim Director of YFC, January 1998 – June 1998; I never met Myrna.

Carl Redwood, Technical Support person at Hill House; I spoke with Carl over the phone several times; though he tried to be helpful, he was unable to solve the network problems.

Management Team for YFC:

Barbara M. Parees, Director of Personnel and Civil Service Commission for the city

Ron Painter, Manager of Pittsburgh Partnership (assistant to Barbara)

Jim Brenner, Program Administrator

Stephen MacIsaac, current advisor to the Interim Director, previous Director of the Department of Education and Support Services for the Hill House Association, previous manager of YFC.

Note that the Hill House Association is an umbrella organization for many Pittsburgh community centers, and that the Pittsburgh Partnership is an agency of the city of Pittsburgh and provides funds for various organizations including YFC.

During my visits to YFC, I would always see Darlene, and almost always I would at least say, "hi," to Ronele, Mary, and Dave; periodically I would also see Kellin or Malcolm. Basic information about my observations was given above, and more details will follow below.

Technical Environment

Regarding YFC's physical space and facilities for the computers, they have an upstairs computer lab which holds eight computers. The lighting is good, every computer has a chair in front of it, and all but two have a keyboard holder which slides out from the desk. Wires are all scattered behind the computers, but are reasonably safe. The room could probably hold a dozen people comfortably. Security for the room is rather lax, but the room and building can be locked if necessary. When Pomona's friend got all the computers online, he labeled each with its proper IP, or Internet, addresses, which also corresponds to the computer's name on the Network Neighborhood, or local area network.

Regarding the computers themselves, all are 120 MHz Pentium PCs with 16 MB of RAM. Each of the eight computers have an Ethernet card, and they connect to the Internet via the ISDN wiring in the lab. There are two printers, each connected to four of the computers via a switchbox. One printer is a HP 655C Inkjet, and the other is a HP 4 Plus Laserjet; both work well.

All of the computers are running Windows 95. They have Internet Explorer, GED software (for YF), Office97 (for word processing), and several games. Once Internet connectivity was established, we installed the computers with Tera Term Pro, a freeware Telnet program; Win-FTP95, a shareware FTP program; WinZip, a shareware compression utility program; and software for the Urban Youth Talent Pool program.

Finally, all of the computers are properly configured for network access. Both the Network Neighborhood and the Internet are accessible from each computer in the lab.

Technology Management

The technology management of the computer lab is rather ambiguous. No one at YFC or YF has the explicit job of overseeing the computer lab. The staff who need the computer lab to do their jobs (Pomona, Dave, Darlene (as Office Manager)) work to ensure that the lab is in working condition, but there are no guarantees.

Currently, all of the computers in the lab work well. If something in the lab breaks or stops working, I doubt that anyone other than Pomona would have a chance at fixing it. Unfortunately, Pomona's job is to lead special projects for the School-to-Work program, not to troubleshoot computer problems in the lab.

When I first arrived at YFC, none of the computers were online. My initial attempts to fix the computers were unsuccessful, and subsequent attempts, even with the help of the Hill House technical support, also failed. Pomona needed the Internet access so that her students could look for recipes on the WWW (to create their cookbook, which was the special project), and only when she called in her network-expert friend did everything finally get fixed.

Obviously, some additional, concrete technology management is needed. Pomona will not be around forever, nor is it her job to care for the computer lab. Perhaps a lab overseer, or increased technical support capabilities from Hill House are appropriate; the former (catch the problems before they ever start) is probably preferable over the latter, though both combined would certainly be most desirable.

III. Needs Assessment / Problem Statement

My focus in helping YFC was twofold.

- 1) I wanted to ensure that all the computers got online and stayed online. Without computers that had Internet access, part of the School-to-Work program would be unavailable, the Urban Youth Talent Pool project would not succeed, and the Youth Fathers program would

not be able to utilize the job searching capabilities of the Internet. Obviously, establishing and maintaining Internet access is important to YFC, and also to YF.

- 2) I also wanted to convey technical information to Darlene. With increased technical and computer knowledge, she could better manage the office, assess future needs of YFC, teach others basic computer skills, and possibly even troubleshoot technical problems with the computers. On a personal level, Darlene benefited individually from my teaching, which made her more marketable for future jobs.

IV. Project

goals for each, your plan of action and brief summary of what happened

As mentioned above, the goals for the project were twofold: get all of the computers working properly, including Internet access, and teach Darlene the basics of computers. A significant part of what I wanted to teach Darlene included Internet related topics. Therefore, our plan was that we first focus on getting all the computers online, learning non-Internet basics along the way, and then, once the computers were online, learn Internet basics.

Below is a basic outline including problems, successes and reflections regarding the weekly occurrences of the project (starting on 2/4/98 lasting through 5/2/98 with a few breaks in between.)

1. Introduction to everyone at YFC and YF; since the YFC program began on 2/10/98, printing capabilities for all computers was important.; Darlene and I established printing capabilities for all computers (Computer Basics Covered: Print Drivers.)
2. Assess the current situation of all computers; six fully functional computers, one with startup problems, and one not working at all; first seven can print, none have Internet access; Darlene and I switched the broken computer with a working one (which Vaunda was previously using as her computer.) (CBC: Scandisk, File Systems, Hardware of the computer.)
3. Attempt to establish Internet access for all computers; YFC gets Internet access from the Hill House Association, so I call to get the appropriate network configuration numbers; simply inputting the correct numbers does not work (CBC: Internet configuration, file systems.)

4. Continue attempts to establish Internet access; I try everything I know without success; I call in the help of Carl Redwood, a technical support person at Hill House; Unfortunately, he cannot direct me well enough to solve the problem either; I request that he makes an on-site visit to fix the problem (CBC: Inner working of Internet and system configuration)
5. Wait for Internet access to be established; Darlene and I could do no more by ourselves, so we occupied the time doing other things; I worked with Mary to oversee a possible upgrade to Windows 95 for her computer, but her motivations for an upgrade were unclear to me, since she did not know a great deal about computers; Darlene and I work on Microsoft Excel and Access to create a useful way to digitally categorize the School-to-Work participants (CBC: MS Excel, Windows 95, Windows 3.1, file systems, shortcuts, dealing with error messages.)
6. Partial Internet access established; Carl notes that not all of the network cards are Plug and Play, and therefore will not automatically configure; One computer online; Darlene learns lots about the Internet, since we now have a computer with Internet access (CBC: file downloads, Telnet, FTP, WWW Browsing.)
7. Continue Internet basics, some computers online; Pomona needed many of the computers online for her special project, so she called one of her network-expert friends, who got half of the computer online; Darlene and I continue focusing on Internet related topics (CBC: Telnet, FTP, UNIX, E-mail, file systems, file compression.)
8. All computers online; Pomona's friend visited YFC again and got *all* the computers online; Darlene and I cover continually more advanced computer topics; we established the local area network among all computers in the lab (CBC: Network Neighborhood, file sharing, E-mail, installing programs.)
9. Begin revamping YFC's website; with all the computers online and Darlene significantly more knowledgeable regarding computers, we decide to tackle the updating of the YFC website, which had not been touched since 1995 (CBC: HTML, WWW)
10. Continue website work; Darlene begins working on YouthWorks, and has less time to devote to this project; she provides background information and editing input regarding my changes to the website; (CBC: HTML, WWW)

11. Continue website work; Darlene and I are both busy; website progress can be made slowly but steadily.
12. Complete website revision; I totally updated all of YFC's website, Darlene gives her input and approval; prepare for final presentation.

V. Conclusions and Recommendations

Not only did we accomplish the goals we set out to achieve (establish Internet access for all computers and increase Darlene's technical and computer knowledge), we also ended up with an entire revamped, improved, and up-to-date website for YFC. I encourage the reader to explore <http://hillhouse.ckp.edu/~yfc>. The fact that Darlene regularly sends me e-mail is certainly proof that her computer abilities have vastly improved.

If one improvement could be made regarding the YFC and YF computer situation, I would recommend hiring a full-time computer lab support person. Not only could they supervise the lab to ensure that the equipment was being used properly, they could also provide the necessary technical support for the computer problems as they arose. Furthermore, that person could teach classes and provide computer knowledge to anyone who was interested in learning. If Pomona leaves, who will call in their network-expert friends to ensure that all the computers are working properly? I hope that will not be necessary in the future because the appropriate and necessary technical support will already be in place for the Young Fathers program and for Youth Fair Chance.