School of Computer Science
Course 15-391

Spring 2007

Final Consulting Report

Duquesne-West Mifflin Boys and Girls Club

Emmeline Altschul

Duquesne-West Mifflin Boys and Girls Club
Executive Summary

Member Consultant, Emmeline Altschul
Community Partner, Pat Bluett

I. Background Information

The Boys and Girls Club (BGC) of America is national non-profit that supports community development and member programs throughout the country. The Duquesne-West Mifflin BGC is a member of the national organization with the following mission.

> *The primary mission of the Boys & Girls Clubs of Western Pennsylvania is to promote health, social, educational, vocational and character development for boys and girls ages 6 through 18, by self-esteem, values, and skills.*

The main program offered by this club is an after school program that serves over seventy-five members (mostly pre-teen members) in an economically depressed region. Members participate in various programs at the club, including dance, games, arts and crafts, and computer time.

The Technology Center at the club houses over twenty computers of varying ages and capacity. Members primarily use the computers for games, though some specialized programs, like the photography Power Point class, are offered. However, budget constraints have removed many of the programs like the video club, and the computers age and lone internet connection make many computer tasks slow.

Also, the internet introduces new and inappropriate material to the club, such as violent websites and adult content material like myspace and dating websites. A computer room supervisor attempts to monitor member computer usage, but given the number of members using computers at any one time, this task can be overwhelming.

Furthermore, a serious lack of technical support exists. While Pat, the club's Executive Director and only full-time staff member, is competent with basic computer functions, she struggles with the more advanced knowledge required to effectively manage an entire networked computer system. Volunteer support from a former member, Denzil Kelly, provides all of the technical support, but he is unable to provide much of the day to day maintenance and does not communicate his work to the staff.

The goal of this project was to provide consulting work for the club to facilitate managing the Technology Center more effectively in order to better support the mission of this organization. By teaching the staff to use and maintain technology more efficiently and improving internet safety, staff has more time to focus on the members and the members receive have a safer, more productive experience in the program.

II. Consulting Tasks

Three tasks to support the club's mission developed after several consultations at the club.

The first task was to create a technology maintenance plan in order to schedule computer maintenance and updating. The reactive approach that was formerly taken caused difficulties because there was rarely funding or time to fix technology problems when they occurred leaving these problems either hastily patched or left unattended. This uncertainty meant the staff could not rely on technology, significantly reducing its use, keeping the same redundancies and hindering the members' technology education.

Second, members were using unsafe and/or inappropriate internet sites (ex. Myspace, dating websites, etc.) at the facility. The Technology Center manager monitors the internet use, but the task can be overwhelming with over twenty teen members using the computers at the same time. The easy access to inappropriate material is in direct conflict with the organizations mission and overall common sense. We sought to implement an internet filter would allow members to take advantage of the internet, but minimize the risks and allow for easier monitoring.

Finally, we worked to improve Pat's confidence and proficiency with computers so that she could better manage the Technology Center. Pat's limited technical proficiency caused wasted time, disuse of helpful software, and frustration with new technology. Therefore, we worked to improve Pat's understanding of general computer processes, useful techniques and introduced new e-mail software.

III. Outcomes

The technology maintenance plan created this semester is a simple guide sheet that formalizes and clarifies many technology processes at the club. A copy of the document is in Appendix A. The most significant aspect of this document is that it requires documenting all maintenance performed at the club. This new procedure is intended to improve communication between technical support and Pat. Also, the maintenance schedule is now being integrated into the staff's routine, which will hopefully help the computers to run at maximum efficiency.

Implementation of an internet filter is still being worked through. A small keyword blocking system that is part of the router is currently filtering all computers. Several websites have been blocked and members are starting to give up trying to enter many websites with inappropriate content. Also, the volunteer technician installed another internet filter that monitors all of the computers, but we were unable to investigate how it works. Hopefully, the technology maintenance plan will help avoid future confusion.

Pat's computer skills are improved because we discussed some computer terminology and concepts this semester such as the difference between Windows and Linux, open source programs, and help features in programs. Also, we installed Mozilla Thunderbird, which she enjoys using much better than her former e-mail client.

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About the Consultant
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Emmeline is a senior in Chemistry.
She will be attending the CMU M.S. program
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Duquesne-West Mifflin Boys and Girls Club
Final Report

Member Consultant, Emmeline Altschul
Community Partner, Pat Bluett

I. About the Organization

Organization

The Duquesne-West Mifflin Boys and Girls Club is a member of the national organization The Boys and Girls Club of America and part of the Western Pennsylvania division. The Boys and Girls Club of Western Pennsylvania mission statement, as stated on their website, is as follows.

> *The Boys & Girls Clubs of Western Pennsylvania is a non-profit organization dedicated to enhancing the quality of life for youth, with particular emphasis on members who live in urban communities of highly diverse cultures. The primary mission of the Boys & Girls Clubs of Western Pennsylvania is to promote health, social, educational, vocational and character development for boys and girls ages 6 through 18, by self-esteem, values, and skills.*

This particular branch of the Boys and Girls Club main focus is an after school program, though the facility is used for community clubs, a summer camp, meetings and recreation. The club is run by one full-time and six part-time staff of varying technological skill levels and several volunteers and teen aides. Most fundraising and organization reports are handled by the Western Pennsylvania headquarters. The primary job of the staff is to maintain the building and provide programming for the members. This branch of the Boys and Girls Club has been open for many years, but has not always been a part of the national organization.

Facilities

The facility is well maintained and suited to the activities that take place there. The main room is really open and pleasant with game tables and a large television in the lounge area. The Technology Center (primarily a computer cluster) is of adequate size and lighting. There are other parts of the facility such as another large room with a stage and a multi-purpose room in the basement. Security seems to be adequate with precautions such as keeping laptops kept in a locked cabinet with security devices and using alphanumeric passwords. Also, the entire facility is secure and protected with locks and an alarm.

Programs

The after school program is divided into four sections, one of which is Technology Center time. All grade levels (elementary and pre-teens mostly) are rotated through all four sections (games room, YouthPromise/homework, arts and crafts, and tech center) everyday. Computers are mostly used for educational games on the internet, though they have several really cool programs such as movie making capabilities, photo illustration, etc. Members can elect to take a Photoshop/PowerPoint class during part of the after school program and can play on the computers during free time. A camp, community activities and other programming take place within the facility when the after school program is not in session.

Staff

The executive director is the only full-time staff member at the facility. Six part-time staff, one of whom is a para-professional, three teen volunteers, and three adult volunteers of varying technical skill levels help with the after school program. Building maintenance and cleaning are performed by various agencies, including BGC staff.

The club director is competent with computers and hopes to increase her proficiency. Some of her staff enjoy exploring technology and/or are knowledgeable about it, but there is little knowledge sharing because they work in different areas of the club while on duty. The technical expert is an ex-staff member who volunteers at the club and is called in on any and all computer problems.

Technical Environment

The present technology consists of the following.

~8 desktop IBMs - ~7 years old – 10 GB hard drives

-12 Vitaro Laptops - ~ 3 years old – 60 GB hard drives

2 Office computers - ~ 7 years old – 15 GB hard drives

All Windows XP

One DSL line for entire center with a router

Software (not exhaustive list) – BGC Access Database, Word, Excel, Publisher, Movie Making, Photo Illustration, Graphic Design, Music Making, A lot of educational games!

Technology Center is networked by cables and wireless cards and data can be stored from any computer on an Iomega external hard drive (~130 GB)

Internet sites were filtered through a computer running a Linux program until it crashed on March 2nd

Laptop internet use is monitored in Atlanta, GA by the Boys and Girls Club headquarters when chatting on YouthNet

Printers are networked to all of the computers

Backup emergency power supply

The addition of a video camera would allow the members to take full advantage of the video editing software.

Technical Management

One former staff member provides all technical support and maintenance. However, he does not teach the staff how to use the equipment and performs advanced support without communicating with the staff. For minor computer malfunctions, nothing is done, thereby allowing problems to build.

A small program budget supports the computer maintenance, but this money is shared with all of the other organizations' expenses. According to Pat, the headquarters does not view technology as a priority and is still learning about how to use it more effectively. Problems are dealt with by a volunteer technician and there is limited organizational expertise and funds to remedy the problem.

Technology Planning

Technology planning is more reactive than proactive. Although Pat has ideas about technology that could improve the center, she does not have the resources to plan, create and maintain new technology.

Internal and External Communication

Most communication is done in person or over the phone. Some reports can be submitted via e-mail and/or fax. External communication is done through a seasonal newsletter.

Information Management

A member database was recently installed, but no one knows how to use it because the training was canceled. Staff members with more enthusiasm and expertise for technology do not use it because they have other duties within the club during work hours.

Staff hours are tracked using punch cards that are manually recorded into the computer. The club director has very little paperwork related to this task so the time benefit of learning how to do it on a computer has not been a significant motivator for her to refresh herself on Excel.

Business Systems

The business systems (e.g. accounting) are managed at the WPA headquarters. The organization has a budget which is manually tracked. Some expenses are paid by the local branch budget, while others, such as Pat's salary, are incurred by the Western Pennsylvania headquarter's budget. The budget is allocated by the headquarters as well.

II. Scope of Work

Task 1. Create a Technology Maintenance Plan

A technology maintenance plan was created in order to schedule computer maintenance and better track changes. The reactive approach that was taken caused difficulties because there was rarely funding or time to fix technology problems when they occurred. Therefore these problems were either hastily patched or left unattended. This uncertainty meant the staff could not rely on technology, significantly reducing its use, keeping the same redundancies and hindering the members' technology education.

Expected Outcomes

The technology maintenance plan was expected to include items such as weekly and monthly computer maintenance, a standard procedure for technology malfunctions, an update schedule, a training schedule and a list of possible sources of funding for technology initiatives. Input from Denzel, the staff, and WPA headquarters were intended to be part of the creation of this plan, though the final plan was to be the result of Pat Bluett's conclusions.

Contact	Items for Discussion
Denzel	Computer maintenance schedule, new equipment acquisition, training
BGCWPA Headquarters	Computer maintenance schedule, new equipment acquisition, training, funding, malfunction procedure
Staff	Computer maintenance schedule, training

This initiative was intended to lead to further technology integration into BGC operations and improve their efficiency and effectiveness. Technology should be considered in all future decisions of the BGC, keeping the organization modern and competitive.

Activity	Expected Outcome	How Measure	Current Measure	Evidence of Change
Create a Maintenance Schedule	Computers will stay in better condition	Function faster, fewer crashes	Computers maintained inconsistently and not fully	A list of tasks is created, responsibility is appropriated and performed
Create a Technology Resource List	Future technology is easier to obtain	Computer maintenance schedule is followed	A technology resource list does not exist	Technology is kept up-to-date
Create a Maintenance Log	Computer errors are accurately kept track of	List is filled out for every change	No records exist	Technology grant funding, improved understanding of real computer issues
Create a standard procedure for technology malfunctions	Computers will be repaired	All computers function	Call Denzil	Staff is empowered to maintain computers on a basic level

Additional Impacts

This was intended to positively affect the organizations' communications.

Feasibility

The community partner was greatly desirous of such an initiative so this became our first priority. While the headquarters and staff members were not as motivated, we hoped that their input would benefit the plan.

Task II. Improving Internet Safety

Children were using unsafe and/or inappropriate internet sites at the facility. This is in direct conflict with the organizations mission and overall common sense. Installing an internet filter was intended to allow members to take advantage of the internet, but minimize the risks.

Activity	Expected Outcome	How Measure	Current Measure	Evidence of Change
Research and Install an Internet Filter	Children will be kept safe from inappropriate material on the internet	Inappropriate sites are viewed rarely or never by children	Staff monitors internet activity to the best of their ability	Staff is able to interact with children without constantly monitoring all screens, Children use computers for research and games only
Teach Staff How to Use and Update Internet Filter	Internet Filter will remain useful	Inappropriate sites are viewed rarely or never by children	The current internet filtration system does not work	Internet filter remains in use

Expected Outcomes

This was intended to greatly enhance the safety of the members at the facility. Cost, ease of use, effectiveness and feasibility of integration into the system were the main criteria investigated.

Additional Impacts

This action was intended to give greater peace of mind to employees and parents that their children are using the internet for age appropriate fun and learning. The reputation of the BGC is dependent on their ability to keep kids safe, happy and healthy. If parents find out that their children are not safe at the BGC they will withdraw their children.

Feasibility

The community partner was greatly desirous of such an initiative and this was our second priority. She was willing to put time and a limited amount of funding towards this project. We sought out the simplest and most cost-effective system in order to increase the likely-hood that the BGC will be able to continue using it.

Task III. Improve CP's Computer Skills

This aspect of the consulting work was somewhat vague, but was consistently made a part of our interactions. Minor hindrances prevented Pat from taking full advantage of various programs such as Microsoft Word and Excel. Also, small, but important aspects of using a computer such as determining available disk space were unknown to Pat.

Activity	Expected Outcome	How Measure	Current Measure	Evidence of Change
Improve E-mail Functionality	E-mail will be easier to use	E-mail is checked more frequently and efficiently	E-mail is not currently a major form of communication	Pat uses improved system instead of reverting back to iMail
Teach CP basic computer skills	Pat will be more comfortable with technology and continue learning independently	Pat will expand the range and functionality of software	Is it absolutely necessary to use technology for this operation?	Pat chooses to use technology more regularly because of its efficiency
Refresh CP on Microsoft Excel	Pat will be more comfortable with technology and continue learning independently	Pat will create reports using Excel	Pat's current time efficiency in Excel makes the program inconvenient	Pat chooses to use technology more regularly because of is efficiency

Additional Impacts

Pat will feel less frustrated when using computers.

Feasibility

Pat is concerned that better computer skills might intimidate other directors and make them feel left behind. Regardless, she seemed interested in maximizing her efficiency and learning about computers. Moreover, much of what she knows is self taught. Also, her frequent and intelligent questions demonstrated an aptitude and personal interest.

III. Outcomes and Recommendations

I. Outcomes

A. Lack of Internet Filter

Members were accessing unsafe and/or inappropriate internet sites at the facility. The new internet filter allows members to take advantage of the internet, but reduces the risks. Two systems now currently attempt to block inappropriate websites from members.

The first system is through the Netgear router, which allows forty keywords to be blocked. Pat knows how to update this filter and has written instructions of the process. This blocking method has limited effectiveness, however, because of the small number of allowable keywords, the difficulties of using keyword blocking (by inputting the word "ass", words such as "assume" are blocked), and the reactive approach of this filtering method because staff must wait for members to find the inappropriate material. Furthermore, the staff dislikes this filtering method because it restricts their internet content even when members are not present. In contrast, however, this method is simple for the staff to use, free, difficult for members to hack and appears to be an effective tool against many sites. The "blocked page" website appeared frequently when the filter was first activated, but appears infrequently now. It remains unknown whether the decreased appearance of the "blocked site" webpage is due to members bypassing the system, their pursuit of other inappropriate sites and/or because members have given up trying to view particular sites. Pat has added keywords while being guided and documented the process, but has not had the opportunity to update the words on her own. Other features, such as monitoring internet activity using the router, have been encouraged but have not been pursued.

The second system is believed to be a Dansguard computer filter, but no one is able to use it or figure out how to access it. In the future, Pat hopes to learn about this new system from Denzil, the volunteer technician who installed it. This alternative filter is a result of the consulting task because our investigation of the former internet filtering showed Denzil the importance of this aspect of technical maintenance at the Boys & Girls Club. Also, Denzil and I discussed many of the aspects that were important for an internet filter before this system was chosen.

The result of all of this software has allowed members a safer internet experience while at the Duquesne-West Mifflin Boys & Girls Club, which is directly related to their mission of creating a safe place for members. While the addition of this software to the Technology Center cannot guarantee that members will only view approved websites, not use online chatrooms, etc. and still needs significant improvement, it is still proving to be a valuable first defense.

B. Creation of a Technology Plan

The Boys & Girls Club formerly took a purely reactive approach to computer maintenance. The new technology maintenance plan should help guide Pat and her staff in routine maintenance and technical issues. Appendix A contains a copy of the plan, which was created jointly with Pat.

Although short, creating the plan encouraged Pat to take a more formal, well thought out approach to technology maintenance. We discussed and formalized the maintenance schedule, new equipment schedule, back-up systems, emergency protocol, funding history and created a maintenance documentation sheet. Although seemingly simple, creating this plan involved teaching Pat about various aspects of computers and their maintenance and recording the most important. Therefore, for this task the process of creating the technology maintenance plan was of more importance than the actual document and most of the outcome of this task is documented in the technology plan.

However, the technology maintenance plan has proven to be a useful tool because staff has now independently performed the list of monthly tasks which include computer defragment, disk clean up, and spyware and adware removal. Since all of the computers were fragmented, contained spyware/adware and had usable space taken up by unnecessary data before this task was implemented, the computers were less efficient and slower, forcing members to wait longer for data to load and allowing third parties to spy on their activity. Performing these processes regularly should help minimize the impact these computer inefficiencies and privacy violations, as evidenced when we defragmented one of the computers a second time and it showed less initial fragmentation.

Another aspect of this technology plan was the creation of a formalized process for dealing with computer failures/errors. This process is still being introduced to the staff and is intended to create a consistent, documented approach to fixing computer problems. Once the staff knows how to handle computer issues, problems are more likely to get fixed immediately or in the near future because small problems will be fixed by people on hand, leaving more major computer problems to be dealt with by their technician. By reducing the technician's workload, he has more time to deal with major issues. Furthermore, by encouraging the staff to fix small problems, they will be better role models to members. In future, tracking technical issues can help the club receive funding for technology improvements from their headquarters and make better decisions about technology. Moreover, the BGC's technician has maintained strict control of internet filtering and router passwords and heavily restricted access to computer administrative options. This unsustainable action limited staff's ability to learn about and fix the computer systems and encouraged staff to disassociate themselves from computer problems. The maintenance history forms keeps a record of passwords so that knowledge of passwords and computer access will now be shared with a limited number of high ranking staff members.

The sustainability of the technology plan is uncertain, because its prescribed actions have not been repeated and it has not become part of the standard operating processes

of the BGC. The routine maintenance and work log all take time that is rarely available to the staff and the technician; and given the technicians record for secrecy. Finally, since the club constantly receives solicited and unsolicited donations, in future, some aspects of the technology plan may feel too stiff and rigid to be useful.

C. Community Partner Computer Skills Improvement

For this task, we worked to improve Pat's basic skills and use available resources to expand her capacity to learn more. Since this was a very broad task, measuring improvement was difficult, but a few instances indicate progress in this task. For example, Pat was able to independently set-up a computer to automatically perform certain routine maintenance tasks and found an online tutorial that explained a technique in Microsoft that she was unfamiliar with. Also, Pat now independently updates her computer, and will read and analyze error messages. Finally, Pat has been taking advantage of the "Help" option in many programs in order to gain more skills independently.

Also, we installed Mozilla's Thunderbird e-mail client and it has greatly increased the ease of using e-mail. Pat was able to install this program on a second computer using written instructions and with a little bit of guidance. The availability and manners of the technical support for her e-mail are highly questionable, but we are unable to fix this problem.

Greater technology efficiency and more resources allow Pat to use technology more effectively to run the club and spend more time focusing on the members.

II. Recommendations

A. Refining Technology Vision

The introduction of technology to the Boys & Girls Club was a major alteration in the daily operations of the after school program. The program could easily function without computers, as the club provides other excellent programs and would still be a safe, fun place for members. By making computers and the internet a quarter of the scheduled programming time and adding some voluntary programs such as the Picture class, the Boys & Girls Club has made technology a major part of the after school program. However, computers cannot be treated like other more traditional programs, such as crafts or step club, because of their expense, rate of change/modernization, and the potential for dangers not previously present.

Furthermore, there is not a clear plan as to what members are expected to gain from their time with the computers. For example, step dance time promotes comradery, expression and physical education. Computers are currently used for primarily computer games and photo club. Both of these functions could be performed without the use of the internet, which introduces significant dangers and potential for misuse to the club. However, the internet could be used for research, communication, and global

exposure, which would help members in the future by introducing them to work skills and appropriate entertainment. Examples of a new program that could be integrated into member's experience at the Boys & Girls club include using video conferencing technology to connect members with other Boys & Girls Clubs in the country or even an international connection. Since members enjoy online chatting, creating a partnership with schools in other countries could help members learn about another country through an activity they are already enthusiastic about. The video club could create movies of club activities, news and about members' interests, thereby encouraging creativity and technical skills. Friendly competition could be encouraged by creating a research topic challenge each week in which members must race to answer a fun question using the internet. For example, "Which US state produces the most jellybeans each year?" The photography club could have members make family trees by taking a picture of their family members and using a graphics program to make computer generated art. Members could be guided through making their own website in order to encourage members to be creative, learn new technology and share their ideas with their friends.

However, in order to create these programs, staff must be trained on their use, a budget must be set aside to support them, and greater responsibility must be undertaken by the part-time staff. Since the Boys & Girls club already has license to all software that would be needed to introduce the programs listed above, the equipment expense would be less $2,000 per club.

A list of resources about how other organizations are using technology to enhance members experience is below.

- http://www.ed.gov/about/offices/list/os/technology/index.html) which contains links to the national technology in education plan and other resources, including ordering publications about internet safety through i-safe

- http://www.cisco.com/web/strategy/education/primary.html - has articles about new educational technology and a link to a useful video entitled "Transforming Education for the 21st Century"

- http://www.cisco.com/web/strategy/docs/education/TechnologyinSchoolsReport.pdf - Discusses several types of technology being integrated into schools and their effect

Even within the Boys & Girls Club there are varying levels technology development. Looking through the organization and finding what works could be helpful in creating a more concrete technology vision for this regions' clubs.

Overall, introducing computers to the Boys & Girls Club was an excellent step towards creating a modern and enriching after school program. However, redefining the vision to take advantage of these new resources and support them is the next step.

B. Adjusted Job Description or the Creation of a New Position

Varying technical issues frequently occur at the Boys & Girls Club ranging from copier malfunctions, computer error messages, how/what computer components to dispose of, and even how to clean dirty computer keyboards. These issues distract staff from their primary focus, the members, and force some programs to be delayed

or cancelled such as the video club. Furthermore, technology advancement and new learning initiatives, such as those mentioned in Recommendation A, are impossible with the current chronic computer problems. With an investment of more regular technical support, the computing infrastructure would be more reliable, less program staff time would be wasted with computer problems, and the members could have quality technology programs. Employee alterations would alleviate much of the frustration and negative affects these technical problems cause the club.

The benefits of having full-time technical support includes having expert advice on how to effectively run various computer clubs, increase staff efficiency by allowing technology to ease workload and better manage data (such as the area network that is currently unused), provide better services to members by supporting new technology and repairing old technology, and increase internet security at the club (which is currently non-existent). For example, the Duquesne-West Mifflin club is currently using older computers. In reality, these computers do not need to be updated based on their current operations, but Pat is constantly frustrated by their slow, fickle behavior. A technician would be able to better service the computers, and keep old equipment running longer so that it does not need to be replaced as often. When the equipment is replaced, the technician would know how and what to buy and provide support for its installation, staff training, etc.

Therefore, I recommend hiring a full-time employee to service all of the area Boys & Girls Clubs. This full-time employee would work part-time at each of the area clubs and be on call for more urgent technical problems. If all area clubs contributed funds to support this position, the cost for a fully trained technical expert would be minimal for each club. By making it a full-time position, the club could hire a more specialized technician since their duties would not include supervising members or any other non-technical responsibilities of most club employees and all clubs could share the benefit of their technical expertise. The full-time employee could help distributed technical equipment, fostering collaboration amongst all area clubs, to maximize the use of donations. Furthermore, a full-time employee would be able to stay informed of new technologies and keep the staff trained on the latest security threats, etc. For example, when spyware and adware first became an issue, a full-time technician would have researched if it was a threat to the club and how to deal with it. Based on their research, they could teach the staff what it is and how to protect against it. Thus far, the commitment and dedication of volunteers has been a great asset to the Boys & Girls Club, but the technology present has outgrown what volunteers can provide effectively.

A technical manager would need excellent communication skills as s/he, would be working closely with the club directors and staff. Demonstrated experience in basic programming, network management, customer service and computer repair are all attributes of a qualified applicant, and experience in education technology would be a plus. Advertising the job online would help reach potential candidates and a sample classified ad is below.

Sample Job Description based on a post by SeaEscape on Monster.com:

Technical manager wanted immediately for the Boys & Girls Club of Western Pennsylvania. Responsibilities will include installing, maintaining, troubleshooting and upgrading computer hardware, software, networks, peripheral equipment and web-based email systems; assessing user training needs and training users in effective use of applications; making recommendations regarding hardware and software acquisitions; acting as a technical resource to assist users in resolving problems; and performing related work as required. Must be able to communicate clearly in writing and verbally, ability to work alone and self-initiate projects, and have expert knowledge of computer systems. Preferred qualifications include an undergraduate degree in information systems or related field and experience working for a non-profit. Although employee will primarily work with adult staff, applicants may be expected to obtain certifications for working with children. Position is based out of Pittsburgh, but applicant is expected to travel in a personal vehicle to various club locations in the region (travel reimbursement available). Salary $40,000/yr, 40hrs/week. Please email cover letter, job history and qualifications to Someone@bgcwpa.org.

Overall, hiring a full-time technician to service all of the area clubs would be cost effective as it would allow the BGC to improve and expand the existing program and alleviate many of the technical difficulties that are currently experienced.

About the Consultant

Emmeline Altschul is a senior in Chemistry at Carnegie Mellon University. She will be continuing work on an M.S. in environmental engineering in Fall 2008.

Appendix A.

Boys & Girls Club of Western PA
Technology Maintenance Plan 2007

Maintenance Schedule

- Monthly
  - Disk Clean-up
  - Defragment all computers
  - Run Spybot Search and destroy
  - Run Norton Anti virus
  - Cleaning with compressed air
  - Cleaning keyboard and monitor

Note: The current lab technician and the club's executive director are responsible for these duties.

New Equipment Schedule

- Purchase/Receive Donations of new CPU units every 5 yrs. (find a program to upgrade equipment) YMCA/Goodwill/Beaumont Foundation/College/National Office
- All other equipment will be obtained as needed via donations, from the National Office and purchases using program money

Note: Grants and other technology funding will be sought by the club's executive director and the administrative office.

Back-up Systems

The external memory system should back-up all files.

Emergency Protocol

If computer systems go down, the executive director, lab technician, and the para-professional staff members are responsible for reinstating system. If the problem requires more technical knowledge than the present staff has, Denzil Kelly will be notified (412-401-8392 or dkelly6@gmail.com).

Funding History

- Beaumont Foundation donated
- City of Duquesne to donate 5 used computers the week of 3/12/2007

Note: Executive director is responsible for receiving technology resources and checking to see if the resources are useful for the club. If they are not useful, she/he will donate them to Goodwill Industries or another non-profit.

Appendix B.

Technology Maintenance Report

Date:_____

Technology Issue Description:

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Description of Task:

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How will this affect club? New logins/passwords? Etc.

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Work Done By:_____

Contact Information:_____

Past Community Partners

4 Kids Early Learning Centers
Addison Behavioral Care, Inc.
Alafia Cultural Services
Alcoa Collaborative
Allegheny County Housing Authority
Allegheny General Hospital Pastoral Staff
American Association of University Women
Animal Friends, Inc.
Animal Rescue League
ASSET, Inc.
ASTEP-Grace Memorial Presbyterian Church
Auberle
Bedford Hope Center
Bedford Initiatives
Bethany House Ministry
Bethlehem Haven
Bishop Boyle Center
Bloomfield-Garfield Corporation
Borough of Crafton
Boys & Girls Club of Duquesne-West Mifflin
Boys & Girls of Wilkinsburg
Braddock Carnegie Library & Community Center
Braddock Redux
Brashear Association, Inc.
Breachmenders
BTC Center
Calliope: The Folk Music Society
Career and Workforce Development Center East
Carnegie Library of Homestead
Carnegie Library of Pittsburgh
Carnegie Science Center
Center Avenue YMCA
Center for Creative Play
Center for Hearing and Deaf Services, Inc.
Center of Life
Central Academy
Central New Development Corporation
Child Watch of Pittsburgh
Children Youth Ministry
Children's Museum
Christian Life Skills
Citizens to Abolish Domestic Apartheid
Community Day School
Community House
Community Human Services Corporation
Community Technical Assistance Center
Competitive Employment Opportunities
Conflict Resolution Center International
Consumer Action Response Team
CONTACT Pittsburgh
Creative Nonfiction Foundation
Dance Alloy
East End Cooperative Ministries
East End Neighborhood Employment Center
East End Neighborhood Forum
East Liberty Development
East Liberty Presbyterian Church
East Side Community Collaborative
Eastminster Child Care Center
Eastside Neighborhood Employment Center
Education Center
Every Child, Inc.
Fair Housing Partnership
Faison Development & Opportunities Center
FAME
Family Services of Western PA
Family Tyes
First Charities/First United Methodist Church
Friendship Development Association
Garfield Jubilee Association, Inc.
Gateway to the Arts
Girl Scouts - Trillium Council
Glen Hazel Family Reading Center
Greater Pittsburgh Community Food Bank
Greater Pittsburgh Literacy Council
Greenfield Senior Center
Guide Runners
Gwen's Girls
Hazelwood Senior Center
Hazelwood YMCA
Heritage Health Foundation
Hill House Association
Hill/Oakland Workforce Collaborative
Himalayan Institute of Pittsburgh
Hope Academy of Music and the Arts
Hosanna House
Housing Alliance of Pennsylvania
HUB Downtown Street Outreach Center
Hunger Services Network
Interfaith Volunteer Caregivers
Jane Holmes Residence
Jewish Family & Children's Service
Jewish Residential Services
Joy-Full-Gospel Fellowship After School Program
Just Harvest
KidsVoice
Kingsley Association
Lawrenceville Development Corporation
League of Young Voters
Light of Life Family Assistance Program
Madison Elementary School
Manchester Academic Charter School
McKees Rocks Terrace
McKeesport Collaborative
McKelvy Elementary School
Mental Health Association of Allegheny County
Message Carriers
Methodist Union of Social Agencies
Miller Elementary School, Principal's Office
Mon Valley Initiative
Mon Valley Providers Council
Mon Valley Resources Unlimited
Mon Valley Unemployment Committee
Mon Yough Community Services
Mount Ararat Community Activities Center
NAACP National Voter Fund
National Alliance of the Mentally Ill
National Association of Minority Contractors / Black Contractors Association
Negro Educational Emergency Drive
New Beginnings Learning Center
New Penley Place

Past Community Partners (continued)

Northside Coalition for Fair Housing
Northside Institutional Children Youth Ministry
Northside Leadership Conference
OASIS Senior Center
Opera Theater of Pittsburgh
Operation Better Block
Orr Compassionate Care Center
Outreach Teen & Family Services
Parental Stress Center
Pennsylvania Biodiversity Partnership
Pennsylvania Low Income Housing Coalition
Peoples Oakland
Phase 4 Learning Centers, Inc.
Pittsburgh Action Against Rape
Pittsburgh Citizens' Police Review Board
Pittsburgh Foundation
Pittsburgh Health Corps
Pittsburgh Interfaith Impact Network
Pittsburgh Mediation Center
Pittsburgh Social Venture Partners
Pittsburgh Toy Lending Library
Pittsburgh Vision Services
Pittsburgh Voyager
Pittsburgh Youth Symphony Orchestra
POISE Foundation
Program for Health Care to Underserved Populations
Project Educate
Providence Family Support Center
Radio Information Service
Reading Is Fundamental Pittsburgh
Regional Coalition of Community Builders
River Valley School
Rodef Shalom
Rodman Street Missionary Baptist Church
Ronald McDonald House Charities of Pittsburgh
Rosedale Block Cluster
Sacred Heart Elementary School
Rx Council of Western PA
Salvation Army Family Crisis Center
Sarah Heinz House
Schenley Heights Community Development Center
Second East Hills Social Services Center
Sharry Everett Scholarship Fund
Sixth Mount Zion Baptist Church
Southwest Pennsylvania Area Health
St. James School
St. Stephen Elementary School
Sustainable Pittsburgh
Thomas Merton Center
Three Rivers Center for Independent Living
Three Rivers Youth
TLC-USA
Turtle Creek Valley Council of Governments
Tzu Chi Wen Chinese School
Union Project
United Cerebral Palsy
Univ. of Pittsburgh - Division of Applied Research and Evaluation
Urban League of Pittsburgh
Urban Youth Action
Ursuline Services
Vintage Senior Center
Weed & Seed Program, Mayor's Office
Wesley Center
West Pittsburgh Partnership
Wireless Neighborhoods
Women's Enterprise Center
Working Order
YMCA McKeesport
YMCA Senior AIDE Center
Youth Fair Chance
YouthBuild
YWCA Bridge Housing
YWCA of McKeesport

Community Partner Information FAQ

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7. What does it cost to be a Community Partner?

The cost for participating in this experience is your time and your commitment to follow through as agreed. As leaders of community organizations, we know your time is of premium value. Those who have made this investment of time have reaped returns many times over.

8. What does the Community Partner have to offer Carnegie Mellon students?

- Students learn to structure unstructured problems. Community organizations are complex environments with complex problems. Your organization provides excellent environments in which to practice the art of structuring problems.
- Students come from different cultural backgrounds and most have never been in a nonprofit organization. They are practicing how to communicate across cultural differences and across technical knowledge differences. They need to be able to make mistakes and learn from them. Community partners provide a supportive relationship in which students can take risks and learn about how to communicate, how to relate, and how to maintain professionalism.
- Students get the opportunity to practice process consulting. They are learning that expertise is only as valuable as the ability to help others solve authentic problems. You provide a context in which students can practice these skills.
- We've found that Community Partners are very appreciative for the students' assistance. There is nothing more rewarding than to experience your efforts as valuable and rewarding for others. You provide that experience for students.
- Finally, you offer a glimpse into career opportunities in the nonprofit arena. Students learn to appreciate those who work in the nonprofit sector, and they grow to appreciate the role and function of community organizations. We hope this appreciation not only informs the choices they make in life, but also encourages them to care and give back to the community throughout their professional careers.

9. How do I become a Community Partner

Contact an instructor, Joe Mertz or Scott McElfresh. Send your contact information: name, title, name of organization, address, phone, fax, location of organization and your interest in being a Community Partner. You will have a telephone conversation and possibly an on-site visit. All organizations are considered, though preference is given to organizations providing services to a low-income community or a community at risk for falling into the "digital divide."

Send email to
instructors@tcinc.org
(email preferred)

Or call
Joe Mertz: 412.268.2540
Scott McElfresh: 412.268.4859

10. Caveats

- We do our best to ensure that students who sign-up for the class are committed to completing the class, however, occasionally, a student ends up withdrawing from the class during the semester. Typically, this happens when a student has under estimated the time they need for this class. We do our best to advise students so this does not happen. When it does happen, there is nothing we can do except to invite the Community Partner to participate in the following semester.
- The semester is short and the student has to do a lot of work in a short amount of time. For this reason, it is critical that you keep your scheduled appointments, do the work you agree to do, and maintain communication with the student. The student will need your feedback on reports quickly, often the next day. When we get to the final consulting reports, we will need fast turnaround time from Community Partners because we also need to get the reports published in time for the Community Technology Forum.
- If there is any chance that you think you will not be able to follow through with the requirements of this partnership, please wait until such time as when you are able to do it. Since the Community Partner is the focus for the student's learning, it is essential that the partnership be sustained for the semester.

Community Partner Information FAQ

1. What is the goal of the partnership in this course?

The goal of this class is to expand the capacity of the Community Partner to use, plan for, and manage technology, administratively and programmatically. The student is learning process consulting, project management, communication, relationship management, problem identification, and analysis.

2. As a Community Partner, what can I expect to happen?

Once you match with a student consultant, you will set a meeting schedule that you and the student will keep for the remainder of the semester. The student comes to your location for 3 hours a week. During this time you and the student work together. This is not an internship in which the student merely works on site. Rather, it is a consulting partnership in which you must work together to achieve your technology goals. The student facilitates a process that moves from assessment, to analysis of problems and opportunities, to defining a scope of work, to developing a work plan, to analyzing outcomes and finally presenting that analysis. As the Community Partner, you are the consulting client. You provide information and discuss that information with the student. But you are more than a client; you are also a learner. In process consulting the client "owns the problem" as well as its solution. The consultant facilitates the client in achieving that solution. The consultant doesn't "do for" the client. Rather, the consultant works with the client.

3. What types of activities are typically included in a scope of work?

Each scope of work is unique and depends solely upon the specific needs and opportunities of the individual Community Partner. Partnerships have focused on a wide range of activities, including: personal information management (how to use Windows, organize files, backup files, use various software packages, use time managers, use Palm Pilots and other personal information management tools, e-mail, etc.), developing a plan for how to train staff and how to incorporate knowledge and skill into job description, designing a local area network, implementing Internet connectivity, designing and developing a web site, determining effective data storage methods, analyzing the needs for an information database, designing and implementing a database, solving technical problems, designing a public community technology access center, determining the specifications for computers, developing disaster recovery plans, and more.

4. Who can be a Community Partner?

This course target individuals playing an administrative or programmatic leadership role within a community organization. Typically Community Partners are Executive Directors, Directors, Assistant/Associate Directors, Coordinators, and Managers. But, we make the selection based on the organization and the role that the individual plays within that organization, regardless of title.

5. Why do you focus on organizational leaders?

For an organization to use information technology effectively, its leaders must have a vision for how it can support the organization's mission, they must be comfortable enough to integrate technology into their personal work practices, and they must know enough to budget, staff, and subcontract appropriately. By partnering one-on-one with a student consultant, the leader has a unique opportunity to build that vision, comfort, and knowledge, no matter where they are starting from.

6. What are the requirements for being a Community Partner?

- Hold a leadership role within your organization.
- Have a computer in your office or one you could or do use in your job.
- Reliably meet with the student consultant 3 hours per week, every week, for about the 13 weeks.
- Come to an on-campus gathering 2 times during the semester. Once at the beginning and once at the end.
- Share information about your organization with the student consultant.
- Read project reports prepared by the student and give the student immediate feedback.
- Complete a brief response form after reading each report and return to the instructor.
- Keep a log of consulting sessions and send to instructors twice during the semester.
- Read the final consulting report. Give feedback to the student immediately.
- Make a brief presentation at the end of the semester (with the student) at the Community Technology Forum. (This is the 2nd on-campus gathering you are required to attend.)

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