School of Computer Science
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Final Consulting Report

Interfaith Volunteer Caregivers

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Interfaith Volunteer Caregivers
Executive Summary

Student Consultant, Shirley Hsin
Community Partner, Rachel Steigerwalt

I. Background Information

Interfaith Volunteer Caregivers (IVC) aims to provide care for the elderly with care-giving services, household safety checks, and information services, in Pittsburgh, Pennsylvania. Its mission is *to maximize the independence and overcome the isolation of the frail elderly in Allegheny County.*

The community partner (CP), Rachel Steigerwalt, is the Program Coordinator of IVC. She is responsible for fundraising and managing the programs that IVC provides. For grant proposals, Rachel compiles information about IVC's programs using Microsoft Access Database, where most of relevant information is stored.

II. Consulting Tasks

The consulting process focused on information management and internal communication via technology usage. The CP advanced IVC's database with the support of the consultant for the purpose of better managing information about IVC's programs.

The CP also made changes to improve internal communication and general computer literacy of the staff to improve work efficiency. The consultant actuated the process through discussions with and training of the staff. Both tasks showed evidence in supporting IVC to accomplish its mission.

III. Outcomes Analysis and Recommendations

After changes to the database has been made and data from separate databases have been merged, IVC is more equipped to care for the elderly in Allegheny County and to obtain more funds for IVC's programs with organized information. Noticeable outcomes include:

- Call logs, which validate the number of calls IVC serves, are approximately 99% up-to-date since consultation began;

- Record search tools provide ease for duplicate-detection as records are entered. Database is currently about 99% duplicates-free;

- Volunteer status and volunteer assignment tools allow the CP to know exactly how many volunteers are active and assigned; and many more outcomes. Please see the full consulting report.

As the consulting period began, IVC began to share Outlook calendars amongst staff members. Contrasting to the situation prior to consultation, more of staff members' time is accountable. Outlook calendars are used more often to record each staff member's time and are checked more often for coordinating schedules. Other technologies, such as using web searches to find answers, have also been introduced to the staff members who are believed to use web searches for many purposes.

Two recommendations are made to improve external communication and document management:

- External communication with the volunteers can also be improved with enriched computer literacy. Microsoft Word and Outlook provides features to send a large set of recipients follow-up letters or emails. This is recommended to IVC because it does not have the resources and time to contact the entire volunteer base regularly in traditional manners, resulting in the loss of valuable reporting of volunteer hours.

- An additional recommendation was made for the purpose of reorganizing documents within Windows directory to facilitate file sharing within IVC.

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I. About the Organization

Organization

Interfaith Volunteer Caregivers (IVC) serves the elderly in Pittsburgh, Pennsylvania with around 450 volunteers. Recently, in October, 2006, IVC merged with Family Services of Western Pennsylvania (Family Services), which has 400+ employees and offers services to children and families to foster community. IVC is the sole provider for elderly care within Family Services. According to the IVC website,

> *The mission of IVC is to maximize the independence and overcome the isolation of the frail elderly in Allegheny County.*

Facilities

IVC staff members work in close proximity. Because they are conveniently located near each other, messages were often communicated orally without documentation. Weekly schedules were often unaccounted for because there were no policies regarding the issue due to the convenience.

Programs

IVC runs three programs: *Faith in Action* Caregiving, Information & Referrals, and Safety for Seniors.

- The *Faith in Action* Caregiving program pairs volunteers with seniors to provide them transportation, reading, groceries, etc.

- Through the Safety for Seniors (SFS) program, the volunteers serve the seniors by performing safety checks against falls and fires and giving safety instruction.

- All other services which IVC does not provide will be referred through the Information & Referrals program.

Staff

IVC has two full-time staff members and one part-time staff member who have various technical experiences:

- As the Program Coordinator, Rachel manages the programs that IVC provides. With an information systems degree, Rachel performs most of technical tasks, including generating queries with the database, creating labels using mail merge, and updating the website.

- The Program Assistant, Roberta (Robbie) Isaacson Lisi, is the other full-time staff. Her responsibilities include initial phone contacts with clients and entering client information into the database. She had taken a course at a neighboring institution on Microsoft Access but has

had minimal experience with using computers otherwise.

- As the part-time Volunteer Administrator, Marian T. Gentile spends most of her time on the field recruiting and talking to volunteer coordinators in large congregations. Her technical experience at work has been limited to creating Word documents for quarterly follow-ups with congregational volunteer coordinators (who are in charge of volunteers at individual congregations).

Technical Environment

Staff members work with similar technical resources regardless of their degrees of usage. These include:

- A 128 MB Desktop
- Windows XP
- Microsoft Office 2003
- Connection to network and servers run by Family Services
- T1 Internet Access

Each staff member works with documents stored on the server and everyone's folders seem to be accessible to everyone else on the team, including private documents. Many documents also end up stored on the physical machines because staff members may not have understood where they are saving the documents. Although Family Services provides a T1 line, internet access is restricted. Also, accessing the database which is stored on the network is noticeably slow.

Technical Management

Family Services has an IT department which provides software installation and data backups. They have also provided QnA session in the past for inquiries about computer usage, however, due to their physical distance from IVC's building, disallows them to answer IVC staff members' questions in person on a regular basis. Routine troubleshooting may be conducted through phone or email, but as the turnaround time for the question-answering is long and explanation are not easily understandable, questions are not frequently asked.

The CP is in part responsible for the technology budget for IVC despite the IT department. She has requested a laptop with the idea of keeping her desktop for volunteer usage on top of the regular budget for next year. Currently, due to the recent merge with Family Services, the technology budget is $0.

Internal and External Communication

IVC had very informal communication. Due to the proximity of their work spaces, they often communicated in person or on the phone. The CP initiated email communications but her coworkers did not generally reply via email. Staff meetings and supervision meetings have become a main source of internal communication since the beginning of the consulting period.

IVC's website is presented well with a good ranking on Google.com (with keywords "volunteer seniors Pittsburgh"). The CP has taken on the responsibility of updating the website, as the website has been created by a volunteer and the hosting is provided by a volunteer. Family Services also dedicates a page on its website to IVC. Volunteers do not generally come from Family Services

website, however. Past success in recruiting Caregiving volunteers online come from posting on www.volunteersolutions.org and www.volunteermatch.org. SFS projects are also advertised at www.pittsburghcares.org, which has attracted several volunteers.

Information Management

A usable database (DB) had been commissioned by IVC and paid for as an Executive Service Corps project. However, many problems in the DB, including not being able to be adapted to new changes in work processes, hindered the organization. An example of the new changes is having one staff member in charge of data entry for both Caregiving and SFS services as opposed to two staff members. Creation of documentation was also neglected, thus many forms and tables were unusable. The CP identified the problem as separate storage of contacts prohibits efficient usage (e.g. creating organizational-wide newsletters required compiling contacts from multiple databases) and efficiency in data entry can be improved by having different form views for different tasks performed (e.g. phone calls should be logged under the client's record, but the staff person responsible for the data entry does not need to see who the volunteer paired for the case is – unless they want to).

As mentioned above, two separate databases stored information for the Safety for Seniors program and all other contacts. A mailing list is generated annually for sending out newsletters. Many volunteers and donations come from responds to this newsletter.

Many programs within Family Services use Qualifacts as their information management system. We predict that IVC will also switch to Qualifacts in a couple of years, as demanded by Family Services.

II. Scope of Work

Task 1. Improving Information Management System

IVC's databases are poorly designed for the use of data entry and data retrieval. Data are often not entered because it seems easier for the staff member to write it down on a form for the time being or because the database does not have a field for the data. Most of the contacts of IVC are stored in one database while volunteers for Safety for Seniors are stored in another. This separation of data causes confusion and much redundant work had to be put in to fix errors. An appropriate information management system can improve statistics good for reporting, for funding, and also for improving productivity.

Some statistics that are useful for reporting and funding include:

- *Volunteering hours*. Volunteering hours are severely underreported. An estimate of 30% of the 450 trained volunteers is actively engaging in caregiving, however, hours are not tracked in the database.

- *Phone calls*. IVC has funds for many services to aid the elderly in Pittsburgh, but many other types of other services are requested. The number of calls that IVC takes for the Information & Referral program is useful for continuing the current grant, since these calls do not make it into the main database.

- *Demographics*. The number of elderly receiving services who are living alone and statistics of ethnic groups are examples of information useful on a grant proposal.

- *Volunteer-client pairs*. The number of volunteer-client pairs that have been actively paired for a considerable amount of time is great for marketing and funding. There had been no way of tracking volunteer-client pairs on a large set of clients in the past.

Email contact information was also lacking in most cases. IVC relied on paper newsletters, which restricted the amount of contact it could have with its volunteer and donor base, due to limited budget.

Productivity was expected to improve through the consultation process. Due to the design of the database, phone logs had been backed up and took two whole work days to catch up come report time.

Impacts to the Mission

Valuable statistics were missing in the information management system. Using the old database, a random selection of clients was mailed a satisfaction survey, which revealed a few clients who are waiting for service, unexpectedly. If the database contains more accurate information, IVC can serve the elderly with more integrity. Also, relevant statistics which shows the enormous help that IVC is to the community are missing. If this information were available, more funding may be available. More volunteers would be attracted to the program or resume their relationship with the paired clients, if this information could have been available in the newsletter. Most practically, less confusion in addresses, names, birthdates and even deceased dates would guarantee that IVC could reach more people who received its newsletter.

Approach

The existed Access database was redesigned and the separate database merged with the improved one. The database had not been completely redesigned because it is believed that the staff would receive the improved database better than a brand new platform. Many forms were designed to reflect the paper forms, decided after discussing the design with the staff members.

Additional Impacts

Besides direct results, this task will impact the following areas of the organization positively and negatively:

- Organization: As a side bonus, implementation of activities above will give IVC a clear idea of work processes that are essential for the programs. IVC will be able to use this information to further improve the recent merging situation with Family Services.

- External communication: With new functionality in the DB to keep track of follow up information or other changes IVC may encounter, IVC will leave an organized and caring impression on the community. The database has a few inaccurate or old addresses. Having accurate addresses would enable IVC to reach its contacts. An e-newsletter list may come about as the result of this task as well, which is a new opportunity to increase donation and community awareness.

- Staff: Data entry will need to be completed within a reasonable amount of time for the database to stay current and useful. Therefore, policies need to be made and work habits need to change.

- Because of the custom designed Access database, resources for troubleshooting will most likely be few. The CP has demonstrated skills to maintain the database, but when encountering a problem she cannot fix, that part of the database will likely to be abandoned.

The CP's demonstrated knowledge and willingness to learn show the potential for database to be sustained within the organization.   The implementation of this task was also successful because it did not require a technology budget. Also, the consultant was able to provide problem solving skills and familiarity with Access database to complement that CP's knowledge of IVC's programs and needs. However, if information management standards are not enforced, a database with a good design would still not solve the problem.

The designated person responsible for maintaining the database must be aware of the data as well as DB structures. The main problem IVC faces with the existing database is duplicate records. This will hopefully change with an easier searching interface, but will not improve the situation unless the staff is trained to be aware of the duplicate records and the consequences. In short, the designated person must be able to monitor the data, be able to enforce information management standards, and be able to make decisions in terms of what information is necessary for IVC's programs to work.

Task 2. Improve General Computer Literacy for Internal Communication

The staff of IVC is experienced in social service but they are not fully utilizing their technical resources for their benefit. As a result, much the internal communication within IVC had been informal. Documentation of discussions was lacking and accountability for one schedules were not complete.

In addition, although paper forms do not need to all be eliminated, duplicate forms do. Increased usage of web searches, email, and Outlook calendar will improve internal communication and productivity.

Although much of their daily tasks involve data entry and document creation on the computer, the staff members of IVC were generally passive about utilizing technology beyond their current knowledge. While they may have questions about computers, they may not always know where to ask the questions. The most evident improvement was expected to be gaining the capability to independently search for answers to computer-related or other questions online.

Impact to the Mission

Because of their inexperience with computers, many tasks which would have taken less time to complete, such as creating mailing labels, were completed manually. Also because phone calls were preferred over email, many messages internally had been accounted for. Redundant work and forgotten deadlines was the result of the confusion, in certain cases. In improving the internal communication using technology, the services IVC provides would accelerate, as the staff members are using more time on current tasks and future planning than past mistakes.

Approach

This task was implemented through discussions about technical questions and answers through one-on-one training session with staff members.

Additional Impacts

A positive impact is that each staff member has better idea of each other's schedules. The CP is be able to track her co-workers' work hours and measure productivity. Staff members can make better judgments with regards to assigning tasks and pay more attention to internal deadlines.

Small progress was made. Staff will have to make more changes to their work habits which may take extra time on their part. Managers and perhaps other trainers will also have to continue to take more time in helping the staff in technology development

The staff members expressed excitement to be introduced new technology. Robbie's amazement with the convenience of web searches and online tutorials during the training session, especially, showed a possibility for continual enrichment of her skills.   The CP has demonstrated technical skills with a familiarity to general computer usage to answer any questions that her co-workers may have. However, she may request training sessions from Family Services' IT department if she chooses to focus on other IVC tasks, especially if the staff members' excitement was only an effect of the presence of an external trainer.

III. Outcomes and Recommendations

Task 1. Improving Information Management System

Before consultation, IVC utilized two databases for its three programs. Contacts for SFS were contained in a separate database from other information. One of the existing Microsoft Access database was modified in order to organize information about IVC's services for the organization to have a better knowledge of the population it serves. The work processes in terms of database forms are provided in Appendix A and screenshots of new forms are provided in Appendix B. With new forms and merged data from the other database, vital statistics have improved and become more accurate, which can be used for writing funding proposals and to justify to past funders. More accurate statistics gives the ability to analyze IVC's services with better accuracy, which increases the probability of receiving the fund.

New data entry form and functions

- *Four new forms*—SFS form, volunteers form, donor's form, Contact log. Previously, all data from separate paper forms had a single data entry form in the database. The improvement allowed data entry to become more organized. These forms were created to look similar to paper forms to reduce the time for staff to become familiar with the database.

- *Two revised forms*—Client form, Friends form. The forms were created first as samples with detailed documentations by the consultant than implemented with CP together. CP demonstrated the skills to handle error detection and diagnosis with the newly created forms and the ability to create new forms.

- *New contact log*—The contact log is automatically updated for each contact made. The log fills a new contact entry with default values for staff to verify. By clicking a button, a new note with today's date will be added the contact log table and linked to an IVC friend such as a SFS client. In contrast with keeping track of the phone calls on   paper and then enter in an Excel spreadsheet, this automation is more convenient for the staff, thus improving work efficiency. IVC is now able to pull an accurate number of calls handled in a day's work for fundraising purposes. This task can be performed within 15 minutes whereas before backed-up data must be entered into the database, which took two days to be enter in the Excel spreadsheet, prior to any statistics to be pulled. As mentioned in the Scope of Work, contacts which can be categorized in the Information & Referral program would not be tracked by the database. Instead, these contacts are tracked on an Excel spreadsheet. These phone calls that are still tracked on a paper log then filled in an Excel spreadsheet is also caught up since the consultation process.

- *Search function in Friends Form*—Basic demographic information is now entered only once in the Friends form and stored in one table as opposed to several different tables, decreasing chance of editing the demographics information in one table and not the other. A search function was also added to the Friends form which allows staff to find the record before creating a new one, once again decreasing the chance of creating a duplicate record for the same contact. The one full-time staff member was given two weeks to use the tool and stated that it is helpful in performing daily tasks.

- *Volunteer assignment tools*—Compared to manually assigning volunteers by looking through

all the community volunteer records, the volunteer assignment form shows a list of eligible volunteers after a few selections are made. An active volunteer is then assigned to a client. The status of the volunteer was implemented during the consulting process to eliminate assigning multiple clients to a volunteer as some volunteers willingly take on several clients. It is also very helpful in removing inactive/unavailable volunteers from the pool of potential matches. Status for clients was also implemented so that staff can easily sort out the unassigned clients for better service.

- *Unimplemented forms*—Although created, the SFS form should be formatted. Donor and congregation forms have not been created. These are necessary for the database to be completely useful for all work processes in IVC.

New switchboard

The database has a new switchboard which is a table of contents that serves as a database entry point for users. IVC staff may decide to enter client information so they will open the form specific to clients. Managers may choose to open forms about donors. Whereas before the startup form was a form that had no use to IVC's daily tasks, a switchboard allows staff performing different tasks to open the appropriate form.

Split Database

Multiple staff members can now use the database at the same time using a split database. A split database operation creates a copy of the database that contains forms and one with backend tables. The front-end copy can be distributed and stored on personal hard drives, which the backend copy must be shared on the server. CP had split the database with consultant and given online references for future use. She has also imported additional tables and forms and performed "Compact and Repair Database" after the database had been split. There are no foreseeing problems with a split database. In case of difficulties, CP may contact Family Services IT department who has expertise in Access.

Merged database

Previously, Safety for Seniors contacts resided in a separate database. Now merged with all other IVC contacts, mailing lists can be more efficiently produced, data is easier to maintain, and reported statistics are improved. For example, several clients who participant in the Safety for Seniors program are also clients of the caregiver service. Previously, the total number of people served would be reported from both databases. In order to take in account of any duplicate entries, the duplicates are taken out manually. Now an accurate number of people served can be reported, and a distinction of services that people have requested can also be made if necessary.

Managerial benefits

During the process of implementing a new database, the CP had the opportunity to better understand the work performed by her staff in the volunteering recruitment area. The CP had asked the Volunteer Coordinators more questions about her work for several reasons; one of which was to answer the consultant's questions. For example, the Volunteer Administrator had been performing quarterly meetings with the congregational volunteer coordinators, which was revealed during the consultation process. The understanding between the manager and the staff is important for the organization to function well.

Merging with Qualifacts

The plan for IVC to switch platforms to unify data management within Family Services has been delayed for a couple of years. When the switch begins, this consultation process will allow the CP to provide comprehensive information about input data fields (from the forms) and necessary reports to start building Qualifacts database. Currently, the staff can become familiar with best practice standards, such as the importance of consistency in names ("Pittsburgh not Pgh.") for ease of querying, that are relevant and essential for sustainability of a new platform. The existing data will be merged by professional database consultants from Qualifacts. Although it is expected to provide all the functionality that the improved database can provide, the user loses some control over creating new forms and queries with Qualifacts on-the-go, because it is web-based.

Mass cleanup

DB is 99% duplicates-free after a mass cleanup performed by CP and two-week long evaluation by staff. Some duplicate records have not been detected due to misspelling of the names or addresses. More up-to-date data directly aids IVC in meeting the mission with less confusion when helping clients or dealing with community volunteers.

Documentation

In an effort to provide sustainability, changes on the database have been documented in detail. The documentation has been given to the consultant for troubleshooting reference. http://www.techonthenet.com/access/index.php has tutorials on typical Access topics, which can be useful for the future.

New data entry practices

- *Required email contacts*. Along with new forms, training and new policies also made it possible for IVC to collect important data for fundraising purposes. New policies that were made included requiring clients and volunteers to provide email information when applicable. Stats showed 5 new contacts, who are mostly donors, were asked and complied with email contacts within the two weeks since the database has been implemented. This allows IVC to have the capacity to send online newsletters. It also gives IVC the capacity to send non-intrusive email reminders to return volunteering hours. http://office.microsoft.com/en-us/access/HP051874161033.aspx#useAC is useful for building a mailing list with Access Database.

- *Sustainability*. CP is continuously pursuing further education on current technological usages in her industry, which makes it possible to sustain the solution. However, there is no evidence that the staff can handle special situations where the current database may need adjustments. CP has demonstrated the ability to aid the staff in such situation but she may choose to bring in external help. As mentioned above, setting best practices standards has helped the work to become more efficient. CP has documented data entry conventions and passed down to the staff, which shows her dedication to sustain the improved database. Motivation for staff to use the new technology may be the biggest risk to sustainability because staff has to take more time to enter the information after a case is opened right away.

- *Risks*. The database may have provided the capacity for more improvement, but there is a risk that the information in the database is not accurate. If regular assessment of the data is not performed, inaccurate usage of the forms may result in unfilled or inaccurate/misspelled cells.

Frequent assessment of the data that could show the accuracy of the database, such as comparison of paper form counts and new database entry counts, has been suggested to the CP. Another risk for the failure of the database task is the additional step in work processes. For example, previously, phone calls are kept on paper then entered in an Excel spreadsheet. After the deployment of the new database, the previous steps were not eliminated because the majority of the phone calls come from people who are not a long-term contact of IVC and will not make it into the database. These phone calls, as mentioned previously, will be counted for the Information & Referral program. Since an additional step is added for phone calls made by people who are in the database, such as a client in the SFS program, the staff members may feel inconvenienced and stop using the database. It is in the interest of the person compiling statistics using the database to ensure that the staff members entering data are informed of the querying process and understand the importance of recording information in the database. It would benefit the IVC team to implement an additional form for phone calls that are not linked to any specific contact such as an SFS client.

Task 2. Improve General Computer Literacy for Internal Communication

IVC relied on a single full-time staff member and a few infrequent volunteers to complete data entry tasks. These tasks and other office related tasks were often not complete up to standards due to the lack of computer literacy. After the consulting process, staff communication became more efficient and work productivity increased with the help of technology use.

1. *One-on-one training session:* After consulting with the staff, the staff members expressed excitement for one-on-one training. The full-time staff member received a one-on-one training session regarding Microsoft Word and Microsoft Excel. She listed topics which she thought would aid her daily performance in the beginning of the session and after the session documented the answers given to those questions. During the session, Google.com and Microsoft demos were introduced to her. She used the new tools to find answers for her questions with the consultant. Her questions included how to use mail merge, for which the CP had primarily been responsible. Although this particular question was not tackled in the training session, with the staff member's interest in learning, she may be pursuing further education about how to do mail merge. The CP would then receive additional help in creating labels from the other staff member and thus decreasing time to mail newsletters. Since the training session, the staff member uses web searches to find information mainly for Information & Referral.

2. *Using Outlook Calendar and Tasks:* During the consulting process, the consultant observed significant change in the communication of the team as reported by the CP. Previously reported by the CP, the staff was not knowledgeable about the Outlook Calendar and thus did not share the calendars with each other. The staff now updates their meetings and vacations in their calendars and share with the CP. The communication of the team thus improved so that the services that IVC provides are not disrupted by everyone taking vacations at the same time.

3. *Sustainability*: Although the staff members appear interested in pursuing further enrichment of computer skills, evidence for long-term usage of newly introduced technology such as using search engines for answers are weak. Sustainability may be improved with continuous opportunities for training and setting long term goals such as improving external communications as driving force for enrichment of computer skills.

Recommendation for Task 2. Enrich Relevant Computing Skills for External Communication

Keeping good communication with the volunteer base is essential in upholding IVC's mission to help the elderly of Allegheny County. Currently, the volunteer administrator of IVC keeps in touch with volunteers by communicating only with congregational volunteer coordinators through handwritten cards or typed quarterly letters. Although two or three newsletters are produced for all IVC contacts, including volunteers, donors, and clients, follow-ups with volunteers have been lacking. Volunteer hours are estimated to be severely underreported.

Currently, communication with individual volunteers is limited. Volunteers receive a packet at the initial training after recruitment. The packet contains volunteering hour forms which the volunteers are requested to fill out as their relationships with clients advance. Further communication with most individual volunteers channels through congregational coordinators. Yet, the reporting of volunteering hours have been have not met the expectations. Direct communication with volunteers will predictably improve reporting of volunteering hours.

External communication can be facilitated with enriched computing skills of the following existing technology (Please refer to the section below for resources to enrich these skills):

- *Microsoft Word*. Although two or three newsletters are sent out to volunteers, short reminder letters may improve reports of volunteer hours. A template can be set up for the letter to be reused for a large volunteer base if a letter were to be sent out on a regular basis. Handwritten letters and envelopes will no longer suffice. However, a special font or colors may be used for a personal touch.

- *Mail Merge*. If the set of target recipients is large, mail merge is important in automatically generate letters and envelopes.

- *Card creation software*. Birthday cards seem to be an appropriate communication form, if IVC wishes to incorporate a personal touch in its communication with the volunteer base.

- *Microsoft Excel*. The volunteer hours reported may be recorded in an Excel spreadsheet. Other office tasks such as a phone log for people who are not in the database can also be recorded in Excel.

- *Microsoft Access database*. The database created in this consultation process is designed to be used for recording volunteer hours. Staff should be encouraged to use the functionalities provided in the design.

- *Microsoft Outlook*. A mailing list can be set up for all individual volunteers to receive a short non-invasive reminder to fill out volunteer hour forms. It may be beneficial to encourage the volunteers to report their hours via email, depending on the volunteers' preference.

The cost of enriching these computing skills is training time. Some budget needs to be allocated for postage and perhaps for the card creation software. The benefits, however, is a well-trained staff that can follow-up with a large set of volunteers and increase the reporting of volunteer hours with the amount of time it used to need to follow-up with a small set of congregational volunteer coordinators.

Although there are implementation steps specific to each piece of technology, the planning steps are the same:

- *Discuss and decide.* There are many possibilities for improving communication with volunteers; however, one of them needs to be decided for all staff to adhere to. An example plan is to send a short email once a month to all the volunteers, requesting email or phone reports.

- *Trial period.* When a plan is decided, try it out on a small set of volunteers. Changes to the plan may be needed. If the results are satisfactory, then staff should adhere to the plan.

- *Allocate budget.* If a letter or postcard were to be sent to all individual volunteers, budget needs to be allocated for the postage.

- *Training.* Each of these technologies require at least one session of one-on-one training. The trainer should encourage the staff member to record the lessons in his/her own words for convenient reference. Trainer should be familiar with the above-mentioned technology and IVC work processes.

- *Encouragement.* Staff members may need to be encouraged to pursue improvement of computer skills individually. The easiest way to improve staff members' computer literacy is to spark interest in technology, even if it is a very specific piece of technology.

- *Find office volunteers.* An alternative to improving efficiency in follow-ups with volunteers using the above-mentioned technologies or training the staff to use the above-mentioned technologies, an office volunteer may aid in completing the task. Depending on the decided plan, the volunteer's skill set can range from knowing how to use the phone to having the skills to use the above-mentioned technologies.

The following are some resources for enriching skills:

Microsoft Website

http://office.microsoft.com/en-us/training/CR061958171033.aspx lists 30 online courses, each 30 minutes to 50 minutes long. Some highlights are "Use mail merge for mass mailings and more" and "Prepare for the holidays: Write and send a newsletter with Word". Training videos for other Microsoft technologies are available here: http://office.microsoft.com/en-us/training/HA102262291033.aspx.

Google Groups

http://groups.google.com/ is a place where many business professionals in all fields and others ask questions and have discussions. All Microsoft software mentioned above has its own Google group. For example, searching for "distribution lists with outlook from access" results in the following question and answer. This may help in creating distributions lists: http://groups.google.com/group/microsoft.public.outlook/browse_thread/thread/d5045952a0ef733c/a176488c88c01060%23a176488c88c01060.

TechSoup Articles

TechSoup.com is an online technology community specific for non-profit organizations. "Eight Tips for Telling Your Story Digitally" is an article which discusses the pros and cons of choosing to communicate digitally: http://www.techsoup.org/learningcenter/training/page6738.cfm. Other training materials are listed here: http://www.techsoup.org/learningcenter/training/index.cfm.

Greeting Cards Software Review

http://greeting-card-software-review.toptenreviews.com/ lists greeting card software available in 2007 and an article about what to look for in greeting card software. http://www.amazon.com/The-Print-Shop-21-Essentials/dp/B0009YN1SU lists a product which supports mail merge.

Additional Recommendation 1. Organize Windows Directory

Since IVC merged with Family Services, the organization's files and Windows directory have also been moved onto Family Services' servers. However, the folders are left in an unorganized manner which makes retrieving files inefficient. Many folders are nested within other folders with the same name and many duplicate files exist. Many older and unnecessary files were brought to the new location without consideration. These files clutter Windows directory, inhibiting an organized file structure. Staff members are less able to retrieve a relevant file with the disorganized windows directory.

Retaining many unnecessary old files since the merger is not the only factor that created the current state of Windows directory. Many valuable documents have been created since the merge. However, due to the structure of the directory, files were not saved in appropriate places, causing more disorganization. The disorganization may also be caused by inconsistent naming and filing schemes. Inapplicable file names that do not enable efficient retrieving, such as "Document 1" or other less obvious names, had been used for some files.

An opportunity which Family Services and IVC have taken to increase efficiency and productivity is to share documents on a central server. As files are placed on a central server, IVC staff may share files with each other without making duplicate copies either in paper form or electronically. However, they were mostly unable to benefit from this setup due to the confusing and inconsistent file organization. Some files were saved on individual hard drives instead of the server folders, which further inhibit sharing.

The cost of the time taken to reorganize the folders and files is outweighed by the benefits of saving more time in retrieving files. File retrieval may not be a frequent daily task for IVC staff members currently because it takes more time and energy to search for the files than necessary. However, performing frequent file retrieval is essential in increasing productivity. Being able to retrieve files more efficiently can encourage the reduction of paper forms. Furthermore, the exchange of documents between staff members can be improved. Currently, in the event that the coordinator needs to review staff-created documents or other existing documents, which happens a few times a day, she must request an emailed copy, whose turn around time is sometimes more than half a day, or spend ten minutes searching for the files.

The disorganization inhibits sharing within IVC, let alone with other Family Services programs. Some measures should be taken to ensure IVC takes full advantage of retrieving saved files and sharing documents. The planning steps needed for reorganizing Windows directory are:

- *Research*. Read an article about reorganizing files and folders in Windows XP. This article contains useful tips which may be novel to persons involved in the task. http://www.microsoft.com/atwork/manageinfo/files.mspx

- *Find time*. Estimate and allocate a block of time for all persons involved to focus on this task.

- Backup files. Backup all the files. Sometimes a temporary backup on the local hard drive can conveniently make the reorganization process less stressful.

- *Design folder structures*. Work out all the file and folder naming schemes ahead of time. Then, design a directory structure that is specific to IVC, such as "Volunteer-related" and "Donor-related". A chart, complete with folders and subfolders, may be useful for reference when implementing.

- *Review*. Review the files in the current directory system to figure out which ones are still useful and determine where they should go in the new folder structure.

Some resources below may be useful in organizing IVC's Windows directory:

Family Services IT Department

The IT department may be the most useful out of all other possible resources. First, it may be able to provide naming and filing schemes that Family Services uses (if it does). Besides being familiar with Family Services conventions, the IT department holds computer QnA sessions, which could provide the staff one-on-one assistance in organizing documents that he/she is responsible for. The IT department may also train the staff to become familiar with the resources listed below.

Windows Explorer Search/Sorting Feature

In an effort to organize Windows directory, the search feature may be helpful to find desired documents on the server or on personal hard drives. This tool becomes particularly useful after the reorganization to retrieve files without having to search through multiple subfolders. It could also be used to improve efficiency in retrieving files before the folder structures are improved.

The sorting feature is useful when folders are displayed in *Details view*. Documents and folders can be sorted by date modified, file type, or other desired criteria. See more details about different folder display options on Microsoft website:
http://www.microsoft.com/windowsxp/using/setup/maintain/filemgmt.mspx.

About the Consultant

Shirley Hsin is a senior in Computer Science with a double major in Psychology at Carnegie Mellon University. In the summer, she will be volunteering her time to churches in Taiwan and returning in the fall to start a promising career at Blackbaud.

Appendix A.

The redesigned database incorporates contacts from all IVC programs. Every record will be entered in the Friends Form, which contains basic contact information, before additional information can be entered. From there, many forms can be opened for viewing and editing. For example, if the "friend" is a client, then one may view the SFS Info Form and Client Form. Contact Log is viewable for all friends. All tables are linked by a FriendID, aside from the auto-numbered key.
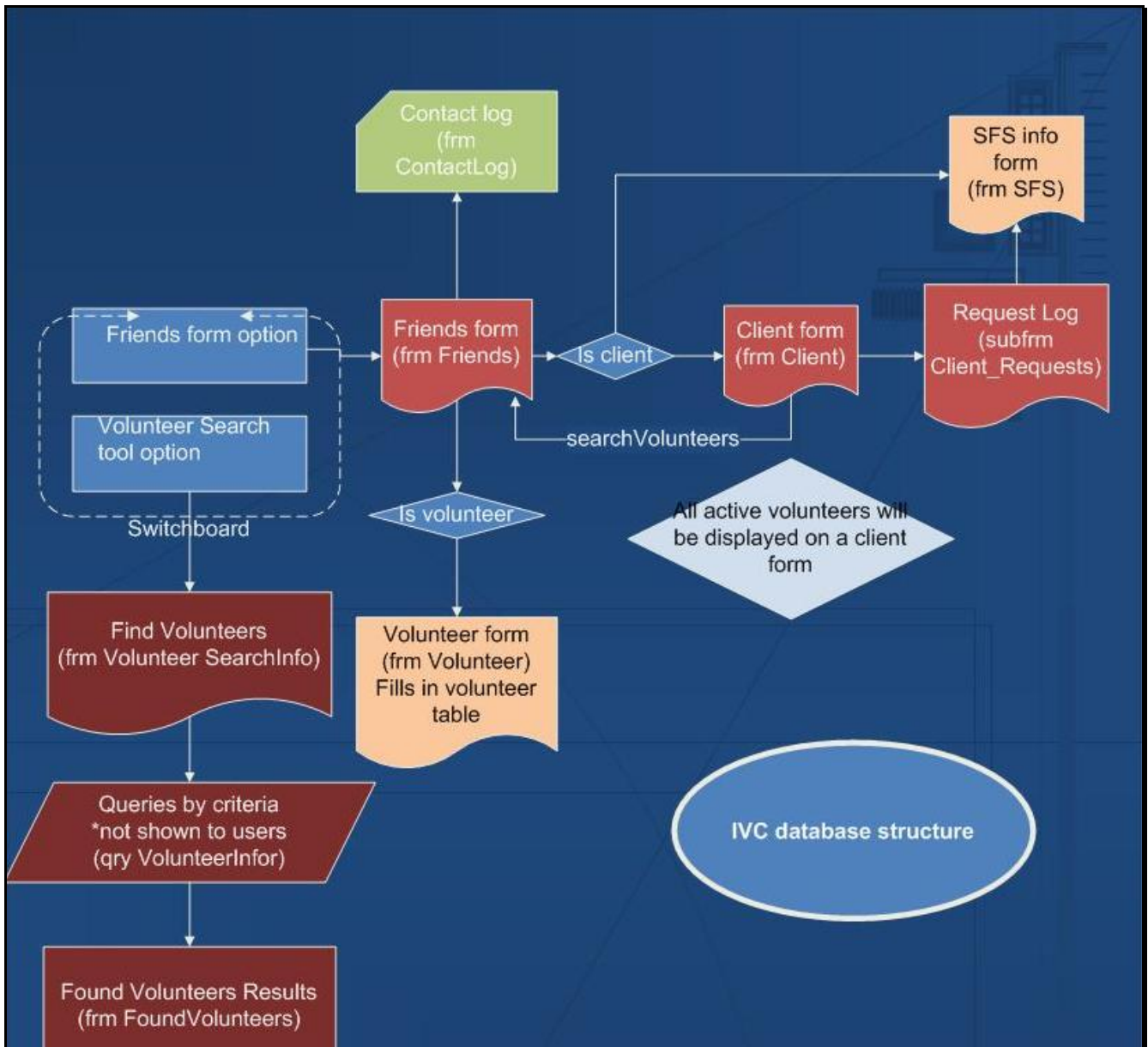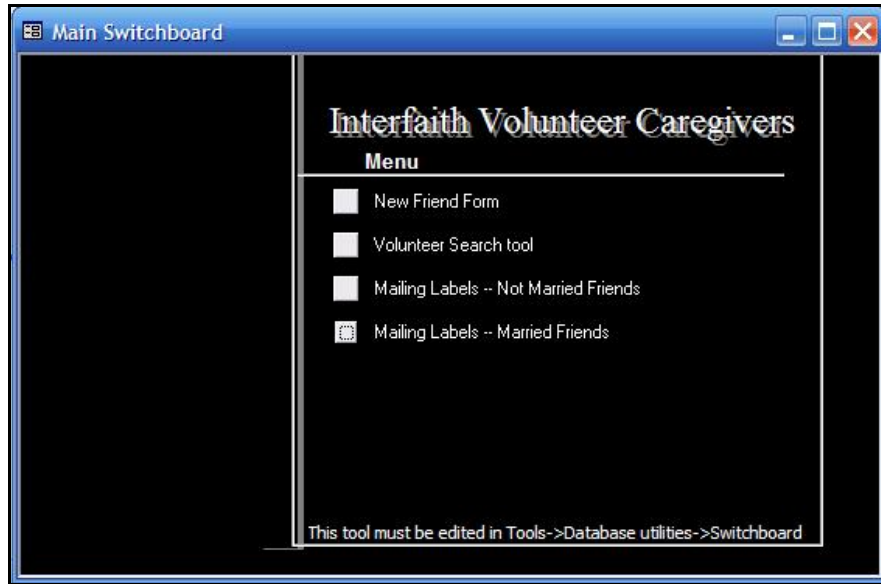
Appendix B.

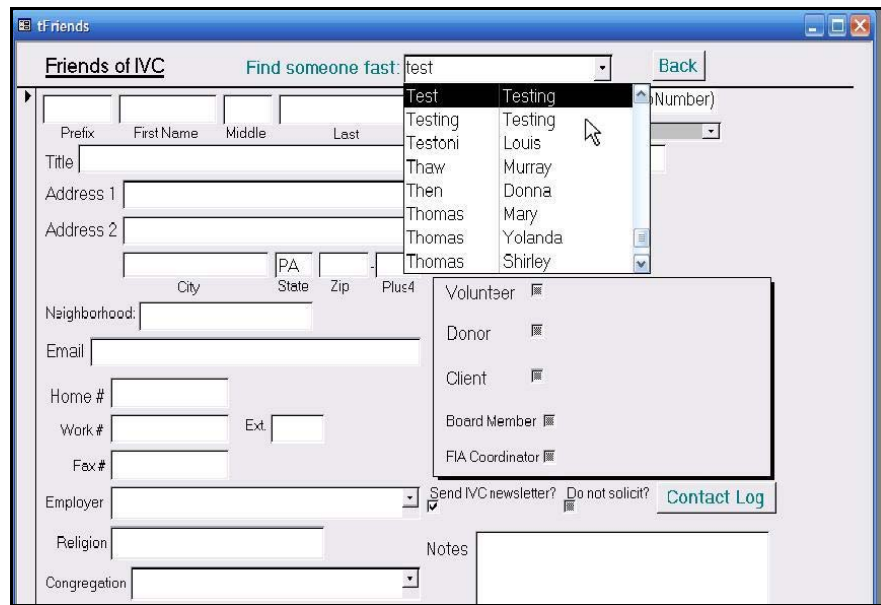The following are screenshots of the main components of the database.

Figure 1. Switchboard

Switchboard opens at startup and allows users to choose the appropriate form/tool.

Figure 2. Friend From with searching function

Added searching allows previously entered record to be edited with ease. There will be less chance of a duplicate created.

Figure 3. Volunteer Search Tool

The Volunteer Search Tool enables searching for volunteers that fit a specific requirement/preference.

Figure 4. Contact Log

The Contact Log automatically notes the date and other relevant information. It is linked to the friend with the FriendID.

Figure 5. Mailing labels

Mailing labels can be generated automatically with Microsoft Access. Contacts are grouped into married and unmarried categories for convenience of addressing.
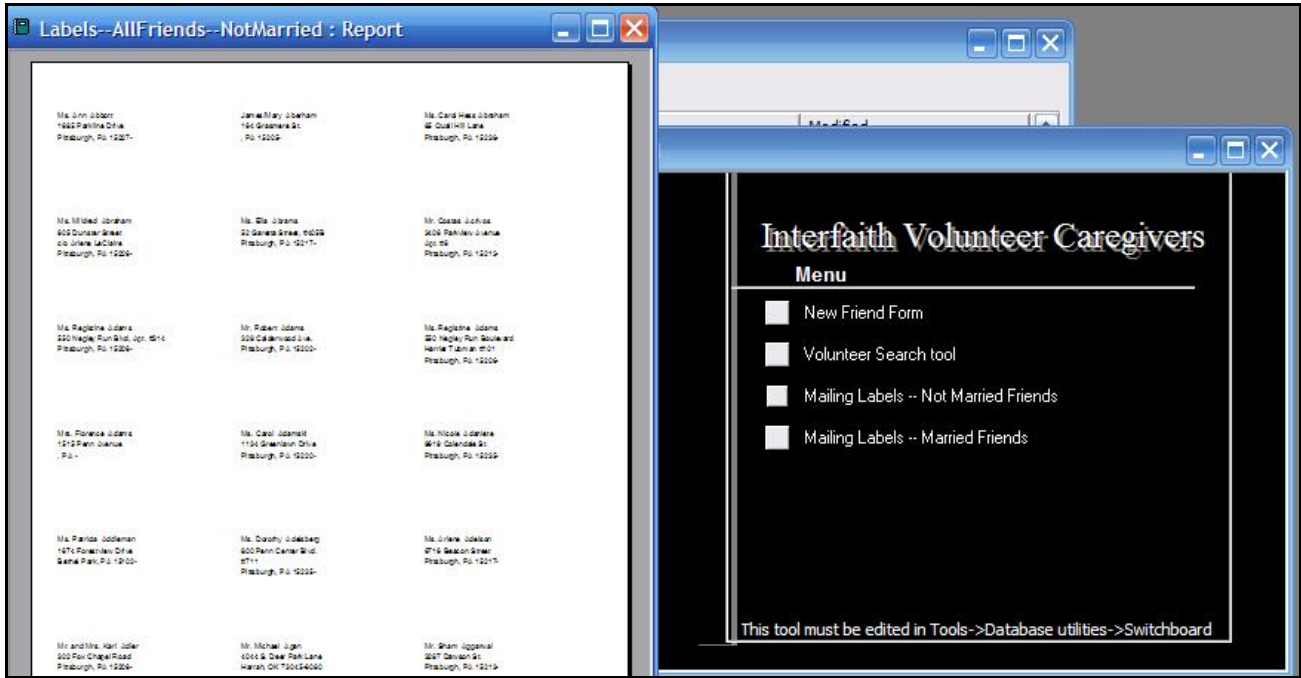
Past Community Partners

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
(continued from back cover)

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.)

(continued inside back cover)