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Need to Update Your Information Technology? Try Service Learning

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Need to Update Your Information Technology? Try Service Learning

High-tech needn't mean high-cost. Consider a service-learning project.

BY ROBIN A. ALEXANDER

While the need for information in the nonprofit sector is great, shortages of time, staff, money, and expertise make it hard to use information technology effectively. The result is often a vicious cycle in which staff time is spent compiling information manually when a simple database could dramatically speed the process. But there's no time to create it.

If that situation sounds familiar, help is at hand in a rapidly growing trend: service learning, in which students, under faculty supervision, undertake information-technology projects for nonprofits.

How Do Service-Learning Programs Work?

Each university and department operates its service-learning projects somewhat differently. In our A.S.S.I.S.T. service-learning program in the Accounting Information Systems (AIS) course at the University of Wisconsin-La Crosse, the instructor solicits projects from local nonprofit organizations, based on these criteria:

- appropriateness for the class
- challenging yet doable in the semester timeframe
- high probability of success
- significant value for the nonprofit organization.

While it can take one or two years to overhaul a complex organization's information system, many useful applications can be designed and implemented in a semester. Creating a database to track clients or computerizing an accounting system for a small nonprofit have proved doable.

The students are mostly junior level accounting majors who have taken an introductory management information systems course. They divide into groups of three or four and are given the list of projects. Assignments are based on students' preferences and the instructor's assessment of their skills as required by the project. After meeting with the nonprofit client, the students write proposals outlining the situation and their solution. The instructor revises these proposals if they aren't specific enough, as is often the case at first.

Following an accepted proposal, the students begin work. To keep the projects on course, the instructor meets regularly to review students' work and provide technical assistance. When the projects are completed, the instructor reviews all submitted files and documentation, and specifies changes if needed. After making modifications, the students deliver the projects to the nonprofit clients and train them as needed. After the semester ends, the instructor is available for questions or to make minor modifications.

What Are the Benefits?

Participating in such a service-learning program offers many advantages:

- You acquire a system that performs a needed function.
- You gain a better understanding of your systems, needs, and opportunities.
- You gain increased technical knowledge and awareness among your staff.
- You receive moral support, enthusiasm, and impetus from working with an interested group of students.
- You have a source of potential staff: The students may want to intern with your organization and may be inspired to choose nonprofit work as a career.
- You acquire insight: Even if you don't use the new system, you benefit from thinking about your information system and seeing it through fresh eyes.
- The projects foster interaction between your organization and the university and may lead to other partnerships.

How Can You Facilitate Success?

It's important to be aware of potential problems as well as benefits. You can minimize headaches by following these guidelines:

Specify the system. The most important success factor is the clarity of your initial specification. Be as clear as possible about what you want. If you need a client tracking system, what data has to be accumulated? What reports are essential, and what should appear on them? What

statistics must be computed? What additional information might be mandated in the future or be useful for decision-making? The more specific you are, the more useful the resulting system will be.

You needn't know all your requirements ahead of time. It's natural for the specification process to be interactive, with input from the instructor and students. But don't heap a list of vague requirements on students, hoping they'll forge a coherent system that will magically do what you need.

Hold realistic expectations. Keep the project focused and not too ambitious. The students are relatively inexperienced and only have a few weeks to develop and deliver the project. Even among professionals, systems work is notorious for time overruns, so it's critical to keep the project doable.

Encourage communication. If communication seems inadequate, feel free to take the initiative and contact the students or instructor. Students may have trouble reaching you or be shy about "bothering" you. Yet it's important that they communicate with you regularly, show you what they're doing, and clear up any questions they have. Encouraging communication early in the project will save lots of time later.

Insist on seeing a written proposal to be sure the students understand your requirements. Relying on oral communication for this function is likely to lead to misunderstanding.

Don't over-economize. While most nonprofits have cash limitations, "false economy" can kill a project. One organization was reluctant to spend $130 for a piece of accounting software. They wanted to do the books on spreadsheet software that they already owned. Using inappropriate software would have cost them much more in time, frustration, and incorrect information than the relatively small cash outlay for the accounting software.

Another example of false economy is trying to get by with an inadequate computer to run the new system. Using an old computer may force the use of less capable software and waste staff time due to slow performance. If you can't afford a new computer, perhaps you can buy a used but adequate one.

Safeguard your data. Be sure you have a good backup system. Students aren't very experienced in safeguarding data while working on it, so backups are essential to prevent accidental data loss. To maintain confidentiality and security, it's best not to let your data out of your office. Students can work on systems without "live" data present. When the new database is ready, your staff can do the data entry, or students can do it in your office under supervision.

Stay in touch. You may need post-project support to correct errors and make changes. While students may be unavailable to provide such support, instructors will usually be willing to fix minor problems and advise you on major ones. Most important, be sure the project includes good documentation. Documentation will help you learn the new system and update it later if necessary.

How Are Nonprofits Using Service Learning?

Nonprofits that have tried service-learning projects say they've benefitted just from talking over their needs with an outside party. Several organizations thought through the choice of an accounting system and whether or not to do their accounting in-house. Others considered for the first time what information they would want if they could have it rapidly from the computer rather than compiling it laboriously by hand. Whether or not they developed and used a new database, they had a clearer idea of their data options. Many other organizations now have improved systems that satisfy real needs, as the sample of completed projects in Figure 1 shows.

As reflected in Figure 1, nonprofits' greatest need has been database work. Fortunately, products such as Microsoft Access help create sophisticated yet easy-to-use databases.

Nonprofits' second greatest need has been to set up in-house computerized accounting systems. Again, modern software facilitates this process.

One recent example is a youth organization that wanted to computerize its accounting system using Peachtree for Windows. Three students were assigned to work with the business manager. They worked hard to learn the organization's account setup, previous statements, and Peachtree. As work progressed, certain problems came to light:

- The organization didn't have the software, and purchasing it became a drawn-out affair. They finally acquired it just after the semester ended.
- The board hadn't approved the project, so its fate was uncertain throughout the semester.
- The nonprofit's business manager was unclear about the desired chart of accounts and changed his mind twice, to the frustration of the student group.
- The books were in bad shape, and students weren't able to obtain data to use in setting up the system. Pro forma data had to be used to test the system.

This project, shaky as it was in process, was a success in that the

Figure 1
A Sample of Completed Information-Technology Service-Learning Projects for Nonprofits

Type of organization	Nature of project
Specific disease oriented organization	Consolidate multiple standalone Works databases into a relational Access database.
Local chapter of national service organization	Create a volunteer database in Access for use in coordinating volunteer and tracking their assignments.
Local chapter of national youth organization	Computerize accounting system using QuickBooks.
Religious service organization	Create a database to track their clients.
Local high school	Set up a computerized accounting system for their student-run store.
Organization catering to youth with special needs	Create a database to track computer hardware and software.
Children's care and educational organization	Create an Access database to track clients and activity, including staff time.
A local business incubator	Set up a computerized accounting system using QuickBooks.
An adult tutoring organization	Create a database to track clients and tutors.
A local youth organization	Create a database to track counselors and clients.
The University VITA program (volunteer income tax assistance)	Specify and flowchart the system for assisting taxpayers, including people and paper flows.
An organization dealing with domestic violence	Set up their accounting system on Peachtree.
A local retreat center	Create a database to track clients and their participation in the center.
The University Involvement Center	Create a spreadsheet-based flexible-budgeting system.

organization is still using the new system and is happy with it.

What's the Next Step?

Although service learning projects are becoming more common, they may not be widely publicized. If you're interested, contact local institutions to see if they offer such programs.

As computer and Internet use escalate, so will your opportunities. One organization commissioned a database that made it easier for low-income households to locate energy assistance programs. The next step may be to make it available over the Internet.

It's an exciting time for using technology to support the important work of nonprofit organizations, but it's also an intimidating time because the technology continues to diversify and become more complex. The part-nership of education and nonprofit organizations can help nonprofits make use of technology while helping students to become effective practitioners. ■

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*Starred resources are available from the Society's Resource Center, 608-274-9777, Ext. 221, www.danenet.org/snpo.
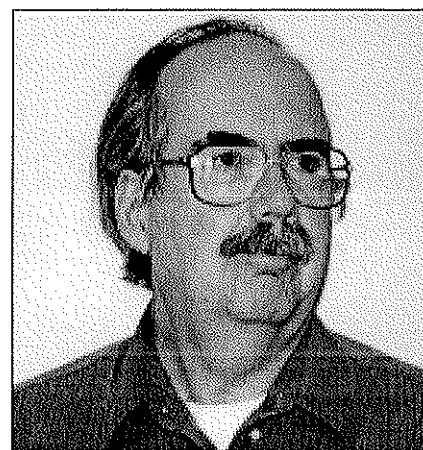
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