The Distributed Support Program at NC State University: Challenges and Rewards of Successful Partnerships

Susan West Klein
North Carolina State University
Information Technology, Box 7109
Raleigh, NC 27607, USA
1-919-515-5415
Susan_Klein@ncsu.edu

ABSTRACT
The Distributed Support (DS) program at NC State University has been in place since 1993, and has been an important part of our strategy to provide effective desktop and networking support in departments and colleges. More importantly, it has been an effective way to develop a strong partnership between the central Information Technology (IT) organization and our clients. The DS program places professional computing staff in departments and colleges at the university for long-term contracts. A number of our staff support multiple departments, satisfying support needs in departments where a full-time support person is not needed/affordable.

Over the past seven years, a number of tenets have developed regarding the DS program:

- There are tremendous benefits to the central IT organization in setting up these formal relationships
- Despite IT efforts to provide excellent support to all departmental support staff, departments believe that there is value in having an official support partnership with the central IT group.
- Managing the relationship with the client department is as important as managing the employee in that department.
- It is important (and often challenging) to find the type of employee with the “people skills” to be successful in this type of position.

This paper provides an overview of the DS program at NC State, and explores its successes and challenges.

Keywords:
Distributed, support, department, partnerships

1. INTRODUCTION
The Distributed Support (DS) program was developed at NC State in 1993 to respond to the growing need for desktop support and system administration in departments and colleges at the university. It has become an important part of our strategy for providing computing support where the problems occur—at the desktop and the departmental Local Area Network (LAN).

Departments, colleges and other units at the university, who have a need for support staff, can enter a long-term support contract with Information Technology (IT), the central academic computing support organization, to become a part of the DS program. The DS program consults with the department to determine the level (classification) of support position that would be appropriate for the department, and is responsible for providing a permanent employee to fill the position for a long-term support relationship. The client department pays the salary and benefits for the DS employee. In most cases, the DS program creates a new position, and recruits and hires an employee to fill the position.

In some cases, departments do not have a need for a full-time employee, and, in most of these cases, the DS program matches the department to another department that has similar needs. In most of these cases, each department contracts for 50% of the full-time equivalent (FTE) of the position, and the two departments share the employee. In these shared positions, the employee has a regular schedule of office hours in each department, and is responsible for managing his/her time in each of the departments. These shared positions are challenging for all concerned—the employee, the DS manager in IT, and both departments; however with a bit of attention to the details, and a great deal of expectation control, these positions work extremely well and fill a vital niche in many groups’ support strategies.

1.1 Key players in the DS partnership
A number of key players are involved with each DS position. The DS manager is an employee of IT and provides oversight for the DS program. Additionally, the DS manager is responsible for managing the DS staff, recruiting new staff, and working with client departments.

The DS employee is the person who is employed by the central IT group, but who works directly with end-users in the client department.

The DS client department is a unit within the university that contracts with IT for a long-term support contract. Contracts in the DS program can be long running—some have been in place for six years. There are no short-term contracts provided through
the DS program—departments must commit to a support contract of at least one year.

Within the DS department is the DS liaison. Each DS client department selects a liaison who provides oversight for the DS employee and represents the client department in interactions with IT. The liaison person is usually someone who has the authority to speak for the department, and can also make judgements about prioritization of requests for support from the DS employee.

1.2 Current status of the program

The DS program has grown to currently comprise ten positions that serve thirteen units at NC State. One unit employs two full-time DS employees; four of the DS employees are in positions that are split between two departments.

The program has had steady growth over its history, owing most of its expansion to word-of-mouth advertising.

2. CHANGING GOALS

When the DS program was founded, the initial goal was to improve the quality of departmental support personnel by creating a way for departments to hire professional staff. Previously, departments relied on the services of temporary student help and graduate students—two groups who usually left after a year or two for a “real” job. Conversely, in other departments, faculty members—in some cases, full professors—were providing computing support—not the best use of faculty time and energy.

Another initial goal behind the DS program was the need to set up shared support positions. Setting up a position to be shared between two departments would be too cumbersome for many departments, and the difficulties of funding and overseeing such a position would be prohibitive for some. When the program was founded, we believed that this niche would be one of the major selling points of the DS program at NC State.

As the DS program has developed, however, only 40% of the positions are shared between two or more departments. One of the chief reasons for many departments’ continued participation in the program is the partnerships that are established when these positions are put in place. Recognizing the value of these partnerships, and focusing on improving them has become a new fundamental goal of the DS program.

3. SUPPORT PARTNERSHIPS

3.1 Why are they good for IT?

In a large academic computing environment, it is easy for the central IT organization to become focused on its own work, and often the groups on campus who get the most attention are groups that are very vocal about their needs. Other departments often go off in their own direction, and, after a time, may drift into technology directions that are incompatible with the directions of the rest of the campus. Whatever the reason, these departments often come back to demand additional support resources, or, may even need to be rescued when their technology strategies diverge too far from campus standards.

There are two primary reasons that departments go off in their own direction. Some departments care very much about their technology strategy and see their right to go in that direction as an issue of academic freedom. Other departments have little or no technology strategy but may have a support person who cares very much about his or her own technology strategy.

In the business world, and in a few higher education institutions, the central IT organization can dictate the technology strategy and can demand that it be followed—the “stick” philosophy of technology support. However, most higher education institutions have long adopted the “carrot” philosophy—setting standards and encouraging their clients to adopt those standards, but allowing diversions from those standards when needed for reasons such as diversity of departmental needs or special curriculum needs.

When the DS program was established, its founders saw it as a way to keep departments in line with campus IT directions and strategies, while allowing departments the flexibility to meet their own local needs. Often, DS employees maintained departmental LANs and other local systems that allowed departments to use some of these wonderful new technologies—networks, shared peripherals, file sharing, and groupware. Many early DS employees were responsible for the initial wiring of their departments (a few are just finishing their departments’ initial wiring projects).

Throughout the first few years, it was apparent that the DS strategy was working—DS client departments were successfully adopting new technologies that allowed them to work more effectively, yet were compatible with campus-wide IT directions. However, another benefit developed that has become more valuable: the central IT organization has become much more aware of the work of the departments who are DS clients, and therefore has become more aware of their computing needs.

Since the DS employee’s work environment is in another department at the university, the details of the work environment become a regular part of the communication between the employee and the DS program manager. The DS program manager becomes a conduit of information into the central IT organization, and becomes an advocate for the department in IT planning activities. Additionally, the DS employee participates in IT staff meetings and other activities, and can participate more regularly in the planning process.

One simple conduit of information, the IT staff mailing list, can give the DS employee on-site in a department, an excellent feel for the activities back in the central group. Gaining feedback from DS employees early in the planning process gives the central IT group an opportunity to incorporate departmental needs. Gaining feedback about departmental needs early in the process allows central IT to make better decisions. Better decisions are good for everyone—from the end-user to the employee on the help desk, and all those layers in-between.

3.2 The value of partnerships to departments

When establishing the DS program, an early hypothesis was the value of allowing departments to share a support position. Over the history of the DS program, this feature clearly has value to a number of departments, yet many others see value in contracting employees on a full-time basis. In fact, there are disadvantages, particularly in the funding model, for departments who contract full-time positions through the DS program. When we ask these departments whether they want to incorporate their DS employee into a position within the department, the answer is almost always
the same: the department sees great value in a formal relationship, a partnership, with IT.

One of the chief reasons for this perception of value is clearly the increased communication that occurs when the department is supported by a DS employee. The communication occurs in both directions—from the department to IT and from IT back to the department. When DS employees participate in staff meetings, IT departmental gatherings, and discussions with co-workers and managers, they gain a better knowledge of IT strategies and plans, and can position their departments to use these strategies and plans to the department’s benefit.

This enhanced communication often comes from another important relationship—the relationship that a DS employee forms with co-workers, both inside and outside of the DS program. Despite efforts to make our central support staff available to departmental computing support staff, it is clear that departmental support staff prefer to use a co-worker within the organization as a resource for help. Departmental support staff who are DS employees often approach the process of getting support as a collaborative, problem solving process, whereas non-DS support staff approach the process as more of a client/service provider process.

This peer relationship with the central IT support staff allows the DS employee to ask more of the central support staff and this is a feature of the DS program. This enhanced relationship is an important part of the DS program. Since IT commits to provide an enhanced level of support to DS client departments, we encourage our central staff to work closely with employees in the DS program.

In addition to the relationship between the DS employee and the central support staff, another important partnership that forms is between the DS program manager and the liaison person in the DS client department. Regular communication among the liaison, the DS employee and the DS manager in IT has tremendous value for all concerned, and the department recognizes the importance of this increased communication.

### 3.3 Care and feeding of successful partnerships

The partnerships that form with departments in the DS program require quite a bit of care and feeding. This is particularly true in the case of a position that is shared by two departments. Over the lifetime of the DS program, there have been successful partnerships as well as those that were less than successful. Learning from successes and non-successes has allowed us to strengthen the program.

#### 3.3.1 Selecting for success

When entering into a support partnership with a department, it is important to select the partners carefully. Evaluating the department’s needs carefully is essential when setting up the DS relationship. In some cases, the department’s needs and/or expectations may not be appropriate for the partnership to work well. In these cases, everyone’s needs are best served by seeking solutions outside of the DS program.

When two departments share a position, careful selection of the DS client departments is even more important. In addition to considering the computing needs, factors such as location, level of support expected, and the work of the department are all critical. For example, two departments who may already be collaborating on research projects often make good partners to share a DS position. In these cases, the departments often have similar needs and often the DS liaisons have worked together previously.

#### 3.3.2 Expectation control

After the departments have been selected for a DS position, time spent managing the department’s expectations is time well spent. It is important that departments understand what is reasonable for their employee to accomplish, and it is also important for them to understand the challenges that the employee faces, particularly with positions shared between departments.

Another important opportunity for expectation control is during the hiring process. The DS manager screens candidates for a position, and presents a small (<4) number of candidates to the DS client department for interviews. Representatives from the DS client department participate in the interview, and when a position is to be shared, both departments participate in the same interview. Interviews are important opportunities for both departments to hear the expectations of the employee, and to understand all the logistical details to be resolved with any position, but particularly a shared position.

Expectation control does not end with the initial establishment of the position. It is an ongoing process and requires a great deal of the DS manager’s time. Regular (quarterly) meetings among the DS manager, DS employee and DS liaison(s) are helpful in ensuring good communication among all parties. When a position is shared between two departments, it is extremely helpful to have both departments participate in these ongoing meetings together.

Ideally expectations in any service relationship should be written and provided to all parties in the relationship. A good service level agreement (SLA) is a valuable tool to have when setting forth on any partnership, and should communicate clearly the responsibilities of the DS employee, the DS department and central IT. However, having a good SLA does not remove the need for ongoing care and feeding of the partnership.

#### 3.3.3 Everyone has responsibilities

In any successful partnership, everyone has responsibilities to ensure the success of the relationship. Helping all parties understand their responsibilities is an important part of expectation control.

The DS manager, of course, has many responsibilities, and has ultimate responsibility for making sure that the partnership works. Other responsibilities include selecting the right departments, selecting an employee who can be successful in the client department(s), and ensuring that communication is occurring among all parties on a regular basis. The DS manager also is responsible for ongoing management of the DS employee and administration of the position.

The DS client department has direct responsibilities for providing equipment and space for the employee. However, more important is the commitment to ongoing communication with the employee. The DS liaison does not have to provide day-to-day supervision and task lists for the employee, however the liaison is responsible for providing feedback to the employee, especially when the
employee is not living up to expectations. Performance problems with DS employees are rare; however, successful resolution is most likely when the problem is brought to the attention to the DS manager and the DS employee as soon as possible.

The DS employee has a number of responsibilities, and many are obvious such as the responsibility to offer excellent service to his/her clients. But one less obvious responsibility is to make the DS manager and the DS liaison aware of situations in the department which prevent the employee from being successful as a support professional. Encouraging employees to take responsibility for their own success is important, but all parties have responsibilities for making the partnership work.

3.4 How the people make the partnerships work

Being a DS employee is challenging work. The employee is often the only IT employee in the client department, and therefore must work very independently. The employee must manage his/her own time and tasks very effectively, and must often juggle a support load that is very heavy. The employee works in an environment where he/she has daily contact with clients who have many opportunities to catch the employee with “quick questions”. Additionally, in some cases, a DS employee in an entry-level position may make a salary equal to or higher than the salary of a research associate or faculty member in the department, and this can create some interesting dynamics within the department.

Even though all parties have the responsibility to make the DS partnership work well, the employee in the DS position is often a key player. When hiring employees for DS positions, we look for a number of characteristics that have been good predictors of success in these positions over the years. First and foremost, is the ability and willingness to communicate effectively with clients and peers. People who are unwilling or unable to communicate with clients and/or peers soon alienate themselves from one or both groups, and lose any chance to be effective.

Another key characteristic in a DS employee is the ability to self-manage and to take responsibility for getting resources that he/she needs. Self-management does not mean that the employee requires no input from the DS manager in the central IT group, but that the employee must be able to manage his/her time and tasks effectively. Additionally, the employee must be able to learn where the resources are for getting help, and to use those resources effectively.

The ability to learn and grasp the structure of the environment is another key factor in a DS employee’s success. The ability and willingness to learn is more important than the employee’s actual level of knowledge. Unique computing environments are common in academe and the ability to learn the environment and apply that knowledge to local problems is essential.

3.4.1 Finding the right people

One of the reasons for the DS program’s success has been the people who make up the DS staff. These people have come from a variety of sources, both internal and external to the university. The members of the staff have a variety of degrees, from Fine Arts to Mathematics, but all have significant experience in customer service roles before entering the DS program.

In a tight labor market, recruitment and retention is always a concern, and finding employees who will be happy in our environment and retaining those employees is a priority. Once again, communication and expectation control are important.

The DS client department also has many responsibilities, but an important one is understanding the intangible factors that can keep an employee satisfied with a position. Employee satisfaction often translates into employee effectiveness, and one important factor is making the DS employee feel that he/she is an important member of the department. Ultimately the partnership between the DS employee and the end-users in the DS department is the most crucial one of all.

3.4.2 Responsibility for success

The DS employee can often make or break the successful partnership, and the employee has a great deal of incentive to make the partnership work. The DS positions are funded completely by the DS client departments, and failure to work effectively in a department often means the termination of the support contract.

Cases where the DS partnership does not work are rare at NC State, because of the attention paid to the factors above during the hiring process, and because of the care and feeding of the relationship. But most of all, our DS partnerships work because of the outstanding group of people who comprise our DS employees. Despite the challenges, turnover in DS positions is low, and employees often advance into other DS positions throughout their careers.

4. CAPITALIZING ON PARTNERSHIPS

The partnerships with departments that have formed as part of the DS program have become an important part of the strategy for supporting distributed computing at NC State. However it is not feasible for the central IT group to manage support personnel in each department at the university. Understanding what makes the support arrangement work well can allow us to improve our relationships with clients who are not a part of the DS program, and provide the advantages of the strong partnerships that form with clients in the program.

Partnerships are relationships where all parties take responsibility for the success of the relationship. This is an important idea for our clients in any support relationship to understand. There are things that our clients can do to increase the chance of a successful support interaction, such as providing complete information, having access to documentation, or communicating clearly. However, as support people, we often expect these things of our clients, when we have never communicated these expectations to our clients.

Clearly, communication with clients is the key to establishing an effective partnership. The DS program at NC State University has been an effective means to institutionalize this enhanced level of communication. When support providers are proactive and effective at communicating to clients, the trust that is established between client and support provider allows both parties to form a successful partnership.