ABSTRACT
In early spring 2002 the technology support staff at Bucknell University set out on a staff-driven reorganization and work redesign. In addition to describing the processes we used to begin, plan, develop and implement our reorganization, we will focus on the characteristics of our unique collaborative work environment and organizational values that enable us to undertake projects such as this.

Many believe that reorganizations have to happen from the top down. Our reorganization took place from the bottom up and it has made all the difference. Ownership, trust, empowerment, collaboration, service, leadership at all levels of the organization, and creativity – these words sum up our process and our outcomes. It has been an amazing adventure!

Categories and Subject Descriptors

General Terms
Management

Keywords
Reorganization, structure, leadership, management, collaboration, teamwork

1. INTRODUCTION
As technology at Bucknell had become more and more pervasive on campus over the last ten years or so, our technology support personnel had struggled to keep up with the demand for support. With most of the Bucknell faculty and staff now having at least one computer, we had outgrown our current model for technology support – a Technology Desk staffed primarily by students and six departmental liaisons (from Client Services, a separate work group) who took referrals from the Technology Desk. While many calls were resolved at the first point of contact at the Technology Desk, this model also often delayed responses until the Client Services liaisons (the “experts”) could prioritize and respond to the issues assigned to them. The Client Services group at Bucknell University was struggling to stay afloat, finding it nearly impossible to keep up with workloads, plagued with miscommunication, and simply not supporting the campus needs for technology support as well as we could have been supporting them. By the fall of 2001, it had become obvious to many that we had outgrown our support model from 1993, but most importantly, our talented and committed staff wanted to do better for the campus community.

2. ABOUT OUR ORGANIZATION
We believe that the key to our successful work redesign is the work environment we have created over the past five years, our organizational culture that we call “Our Collaborative Work Environment.” It was truly the foundation for the process we used to envision, develop and implement our new structure. Our Collaborative Work Environment defines our way of working together based on ISR’s shared values. Our interactions with each other and with our customers are based on honesty, mutual respect and integrity. Our work environment is nurturing and caring: one where we are expected to take responsibility and are given room to grow, make mistakes, and learn. Leadership takes the form of facilitating, coaching, mentoring, supporting and helping. In this environment, everyone actively contributes to ISR and everyone has an opportunity to lead in appropriate ways. We all have a growing set of tools and skills which allow us to be full and active participants in the success of the organization. We celebrate our accomplishments and each other. We refuse to let each other fail.

In our “Guide for Working in ISR’s Collaborative Work Environment”, we outline and define the following expectations for our staff:

1. We focus on customer service as the big picture.
2. We do “the right thing.”
3. We base our relationships on trust.
4. We thrive on communication.
5. We get the right people together at the right time.
6. We believe that collaboration is built on appropriate involvement.
7. We make decisions by consensus.
8. We encourage development and growth.
8. We are all leaders.
9. We recognize accomplishments.
10. We lead by example.

3. THE DECISION TO REORGANIZE
During a November, 2001 meeting with our organizational consultant, Maureen Sullivan, it became clear to the Client Services group that fixing this problem was going to be bigger than a simple reorganization or a rethinking of roles within the work group. In order to get the results we wanted for the campus, we needed to involve a significant percentage of our staff in defining our new work and the new organization we each sought. We knew that we needed staff members on the phones as the first point of contact for faculty and staff, but doing this meant that we needed to undertake a major reorganization of the units in ISR directly involved in providing technology support.

4. WORK REDESIGN PRINCIPLES
“Where do we even begin?” The reorganization we knew we needed to undertake seemed so large. During our first meeting with our consultant, we began by defining work redesign principles that would help us get started. They are:
- Design from the customers’ perspective;
- Determine key processes, work activities;
- Design work from those processes;
- Address “people needs” first, then other system changes later;
- Maintain focus of attention on work that really makes a difference to customers;
- Streamline or eliminate unnecessary handoffs;
- Match people to work (talents, interests, capabilities, etc.);
- Build in ongoing assessment.

5. OUR REDESIGN PROCESS
From the beginning in early 2002, our work redesign was truly a collaborative, inclusive, and staff-driven process that focused on how we could provide the best possible technology support to the campus. The staff collaborated on everything from the beginning and planning discussions, to analyzing our processes, to handling all of the details of the implementation. We included the following ISR work groups in this reorganization: the Client Services staff, the Tech Desk staff, our hardware technicians in Technical Operations, the Engineering Computing Support Team, our Learning Spaces staff, and the library Circulation staff. Throughout the spring of 2002, we developed a new model for technology support; this model was developed for our staff and by our staff. After the initial, broader staff meetings, approximately twenty staff members volunteered to actively participate in the work redesign process, and many more were involved throughout stages of the process. Throughout this collaborative process, nearly one-third of our staff of 94 participated in some way.

A summary of the steps we took during our work redesign process is as follows:
1. The Client Services group met with Maureen Sullivan in November, 2001 where they determine that they needed to reorganize. They also decided that the reorganization needed to be broader than Client Services in order to be truly successful.
2. We held a day long meeting with Maureen Sullivan in February, 2002 with representatives from all work groups that may be affected in the reorganization. Some work groups decide that the whole work group needed to attend this meeting. At this meeting, we focused on defining the work that we do so that everyone was starting at the same point.
3. This larger redesign team met a few more times to further define the work. These meetings were very appreciative and positive in nature and focused on what we could do rather than what we couldn’t do or what hasn’t worked in the past. Example topics included: “What is the work and what should it be?” “What works well now?” As a large group we identified six foci of the work. In these meetings we also identified what would become our overarching goal: resolving 80% of our support needs at the first point of contact.
4. From this larger group, we created a Tech Support Work Redesign team of volunteers to spearhead the redesign process. Approximately 20 staff members participated on this team.
5. The Tech Support Work Redesign team identified our major categories of the work. Small groups were populated with appropriate and/or interested staff. Small groups met to define: “What is the work?” “How will the work get done?” “How should we organize the processes/systems?”
6. Smaller, focused groups defined the work and developed a proposal for how we should organize the work and our roles, given the outcomes that were agreed upon in previous meetings.
7. Groups reported on their defined work and roles at a day-long retreat.
8. At the retreat and at follow up meetings, we came to consensus on our new work and roles.
9. Each staff member completed a “druthers” exercise: “If you had your druthers, what would you do here in ISR?”
10. The work redesign facilitators reviewed all druthers and proposed roles and functional groups.
11. The work redesign facilitators met with each staff member to review druthers and proposed roles, and negotiated positions as needed.
12. Our work redesign plan was presented to ISR leadership.
13. We negotiated personnel issues and moves as needed.

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14. The new work groups focused on the details of the new processes and work and acquired necessary tools and resources.

15. The work redesign facilitators met with the ISR staff as a whole to solicit new “ISR Reps” who will be like “account managers” for departments so that we will have a balance between efficient and relationship-based support.

16. The Tech Support Work Redesign team, in concert with the newly formed work groups, made a transition plan.

17. We communicated our new structure with campus using a variety of modes of communication.

18. We continually improved our processes and roles within work groups.

5.1 ENVISIONING OUR NEW ORG

Stephen Covey said, “Begin with the end in mind.” With this in mind as well as some concepts from “Appreciative Inquiry”2, we set off to envision our new structure. (The focus of Appreciative Inquiry is doing more of what works well.) In larger, inclusive groups of staff, we held a number of meetings and we talked a lot about what we wanted to achieve in the end and what our ideal support model would look like.

From these meetings with Maureen and our staff, we created this set of objectives and outcomes:

External desired outcomes:

- No black holes – we can’t let anything fall through the cracks;
- Happier customers;
- The process needs to promote trust in ISR;
- Clients want faster problem resolution (as many “same day” as possible);
- Clients want the ability to submit and track their problems;
- Clients want a seamless, reliable interface;
- Clients need/want/expect convenience;
- We need to move away from the notion that developing self-sufficient users is our answer for more reasonable staff workloads.

Internal desired outcomes:

- Happier staff (The process should not create additional stress for staff; in fact, relieving stress is a key outcome);
- Staff skills and talents should be matched with needs;
- Internal efficiencies must be achieved at the same time we improve external ease-of-use;
- Flexibility and an appreciative approach are key;
- People need the tools to do their jobs, including access, hardware, software, infrastructure, communication venues, etc.;
- ISR technical staff needs to develop a common understanding of service standards;
- The process will be iterative.

Our staff identified the need to begin planning our new structure in early spring of 2002. To begin this process, we had an ISR-wide retreat where we envisioned what an ideal support model might look like. What do we do and how do we want to do it? In some ways this seemed like we were back-tracking a bit, but we needed to ensure that everyone was on the same page and making the same assumptions from the start. Most importantly, during all of the steps in envisioning our new organization, we focused on what we could do rather than what we couldn’t do or what didn’t work in the past.

In these meetings we agreed upon the primary goal of our new structure -- we needed to resolve 80% of the campus’ technology support needs at the first point of contact while providing timely, reliable and consistent support. We knew this would be a challenge, but we were up to it since we were eager to become a more efficient, more responsive organization.

And finally, it was in these meetings that we broke our work down into six main types: (1) advocate/consulting; (2) first point of contact; (3) field troubleshooting; (4) training, documentation and communication; (5) infrastructure; and (6) copy center and media.

5.2 DEVELOPING OUR NEW ORG

Now that we had identified our six main types of work, small groups set off to dive deeper into their respective work areas. Their assignment was as follows:

1. Describe the work, the roles, the interfaces and the connections in detail.
2. What are the points of contact for the work?
3. What is the appropriate level of staffing? Consider the cyclical nature of our work. How might we adapt the work to assign appropriate staffing levels at peak demand times?
4. Consider all constituencies. Do we offer a service to all Bucknell faculty, staff and students? Does the work change as constituencies change? Does the level of staffing change by constituency?
5. Make sure that your plan meets and addresses the desired outcomes that we defined earlier.

At a retreat in late spring we presented these plans, discussed components of plans as needed and worked toward achieving consensus with our evolving plans.

As a result of these conversations about our new work processes and desired roles, we created a “wish list” of things we really wanted to accomplish in our implementation. Some of these weren’t feasible, but many could be achieved and were indeed achieved in our final implementation. Some of the specific goals

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we set out to achieve in our development and implementation included:

- A small group of staff on the phones with faculty and staff for consistent and quality support;
- “Zero day” problem resolution;
- Consistent responses and processes;
- Continual education of our users;
- Ability to identify trends and training needs;
- Zero downtime mechanisms;
- Guidelines for response/resolution time;
- Easy communication between support centers;
- Staff need to have all resources necessary to do successful troubleshooting;
- Cross-training;
- Creating experts and sharing this information;
- Proactive service monitoring;
- Offices of staff in new work groups in close proximity;
- Equipment for checkout will move from the Tech Desk to Circulation since it can be done more effectively there;
- A copy center will be created to pull services out from behind the Tech Desk;
- We will be able to back up staff during absences and mobilize staff as needed for large projects.

More planning unfolded, and our staff decided that, in order to accomplish our 80% goal as well as other customer-focused and internal goals, our major implementations in this first phase of our redesign would include: (1) a group of staff working in a “call center” supporting faculty and staff during the work day; (2) students providing student and walk-up support at the Tech Desk supported and coached by staff; (3) a new technology support work flow (tracking) system that will provide staff with the ability to store and retrieve knowledge and an efficient way to assign issues to staff; (4) a way to dispatch staff immediately to resolve problems if needed; (5) a way to escalate issues directly to experts as needed; (6) new ISR reps for each department to provide customer service and consulting; (7) moving our equipment for checkout from the Tech Desk to Circulation; (8) all personal computing support coordinated through the Tech Desk; and (9) a “copy center” near the Tech Desk with self serve equipment that was formerly located behind the Tech Desk.

5.3 MATCHING PEOPLE AND WORK

Early on in our process, our staff identified the need to effectively match people and work. Our hope, of course, was that this would contribute significantly to job satisfaction and performance. To do this, we used a “druthers” exercise to find out how our staff wanted to contribute in our new organization.

Our druthers exercise included the following questions which the staff answered and submitted to the work redesign leaders.

1. If you had your druthers, what would you do in ISR? What would be your ideal work portfolio?
2. What gives you the most satisfaction in your work?
3. What would you like to give up?
4. What do you want to learn?
5. What talents and abilities do you have that might be more fully utilized in the organization?

Once we had this information, our work redesign facilitators reviewed the druthers and wove them together into a proposed matrix of people and work. During individual meetings with staff members, the facilitators discussed proposed roles and types of work with staff member and negotiated issues as necessary.

While using this technique made us a little nervous (What are we going to do if the druthers don’t match our needs at all?), we found that it was extremely successful. Flexibility is a key component of our new structure, and that enabled us to ensure that each staff member received some, if not most, of their druthers while creating buy-in and understanding by the staff.

5.4 IMPLEMENTING OUR NEW ORG

Our newly formed work groups were responsible for planning their implementations. Just some of the tasks included creating call center and Tech Desk schedules, purchasing necessary tools and equipment, and readying the new physical spaces.

One of the biggest challenges of the implementation was communication – how, when and what to communicate about the reorganization. Since it was the summer, it was difficult to target faculty. We used every opportunity we could to communicate the most important changes in our structure and services with the campus. Some of the mechanisms we used were: emails, quick reference postcards, our online newsletter, our twice per semester printed newsletter, conversations with our advisory committees, and others.

On August 12, 2002, we rolled out our new structure and services, which we continue to modify and improve as needed. The key to implementing our new structure, though, was flexibility – in people, in plans, and even in job descriptions! We created one job description for our staff which includes all of the roles in our newly created Technology Support work group. This has enabled us to shift and reconfigure our staff as our needs change. It is easy to renegotiate roles and to provide staff with new or different job responsibilities.

6. CONTINUOUS IMPROVEMENT

From the beginning, we defined our redesign process as iterative. We knew that it would have to happen in phases and that we would need to be patient and forgiving at times. During the first few months in our organization, we found many broken processes and we rebuilt them one by one.

Some examples of our focus on continuous improvement of our processes are the following:

- We found early on that we needed a central point of contact within ISR for outages, emergencies and communication on a daily basis. We created a “captain of the day”, one of three staff members daily who carry the captain cell phone and share
this responsibility. The captain role has been tremendously successful.

- We also added a morning “huddle” (a stand-up 15-minute meeting) daily for the field troubleshooting group as well as for any larger projects that might be taking place. At the huddle, we assign new cases, briefly discuss solutions to problems, and figure out the priorities and logistics for the day.

- Very soon after our reorganization, we focused on adjusting our staffing plans to better reflect the support demands by day, time of day and time of year.

- About four months after our reorganization, we rearranged staff offices to better meet the needs of our staff. We created logical groupings given the primary responsibilities of our staff.

- Approximately six months after the reorganization, we added some leadership roles to lead the function areas of student support, faculty and staff support, and training.

- Finally, a key piece of our ideal support model includes distributed support. In the spring of 2003, we took the first step toward distributed support by assigning a student representative to each department on campus. These students create a rapport with the department by visiting regularly, troubleshooting issues as needed, and acting as a feedback loop between departments and ISR. This new service has been widely successful, and the departments have been appreciative of this resource and relationship with their student representative.

7. POST IMPLEMENTATION

While we have yet to formally assess our new organization and service approach (ongoing assessment was one of our desired outcomes and we’ll be implementing it in the near future), I can share anecdotal evidence and informal feedback about our success so far.

First, we believe that we are resolving many more issues at the first point of contact, and our service is more consistent. The informal feedback that we receive on a regular basis from the campus indicates that we are better meeting the needs of our campus. Faculty and staff truly appreciate working directly with staff members on the phone. We have fewer daily crises and much less miscommunication. Emergencies and outages are handled quickly and efficiently. We no longer have a backlog of cases, and our staff has very reasonable case loads. Our staff members have manageable work loads, work regular hours, and are doing work they enjoy, so morale is much higher than it was prior to our reorganization. We seem much more organized. We have even eliminated a temporary position and reconfigured our staff to replace this position.

The true test of our new organization came earlier this summer. We are extremely proud of the fact that, for the first time in three years, we did not hire outside contractors (at $30,000 per year) this summer to do our annual computer installations. Instead, we did the installations ourselves, completed them in half the planned time, delivered a quality, personalized installation, and received many compliments from the campus about this process. In addition to the annual computer installations, we were also able to configure our staff so that we could take on another very large project – upgrading all campus Macs to OS X.

As in any new organization, we have also had our struggles. Creating new processes for things we’ve done in a particular way for years was confusing and challenging at times. We’ve also experienced significant cultural change in the way our staff works every day. In the previous structure, our staff was very independent and they set their own daily priorities. In our new structure, we needed to create and adhere to schedules for the call center and the Tech Desk. We also created a detailed schedule for our major summer projects so that we can be sure that we are accomplishing these tasks in our desired timeframe. Our staff time is now more scheduled, and this helps us to be more organized and effective.

Have we hit our 80%? It’s hard to tell. We know we’re not yet logging every inquiry in our problem tracking system since some are answered so quickly and we’re sometimes too busy to log everything. If we’re not at 80%, we’re close. What’s most important to us is how the campus feels we are meeting their needs and how our staff feels about the work they do everyday. So far, we believe we are well on our way to the organization we envisioned over a year ago.

8. THE FUTURE

Our success in the last ten months is a springboard for many more good things to come. We have celebrated a lot of successes and our staff continues to be motivated to take our reorganization to the next level. We still have quite a wish list to work through, and we do them – one at a time. We look forward to celebrating our one-year anniversary on August 12, and planning for our next big improvements, which we believe will be the really good stuff that we’ve wanted to do for a long time. Our staff is committed to the continuous improvement it will take to ensure complete success with the reorganization because they created it themselves. Most importantly, our staff feels that we are all heading down the right road together.

9. ACKNOWLEDGMENTS

Our thanks to all of the ISR staff who participated in this work redesign process, as well as those who have continued to improve it one process at a time. You have made our organization what it is today.

10. REFERENCES
