Executive Summary

The Center's overall portfolio includes support for residential, administrative, teaching and research needs. It is supported by a relatively thin staff of three, who stagger their schedules to provide more support coverage. Maintaining the wide range of skills necessary for the operation is difficult, and little coverage is available for vacations and other absences. Center users have high expectations for IT services.

A broad portfolio, thin staff, and high expectations have created a challenging environment for IT at the Center. Despite many people praising the tech staff individually for being friendly and willing to help, customer satisfaction is low, with only 14 of 27 survey respondents reporting positive overall satisfaction. As one subject put it, "The system here is not set up to help them be successful." The goodwill earned by the IT staff and the generally good existing technical infrastructure provide reasons for optimism; we believe that a combination of technical configuration changes, procedural revisions, and a clear strategic focus could provide significantly better outcomes, while maximizing the utility of the technology investment at the Center.

> "The system here is not set up to help [the technical team] be successful" —*Center user*

Findings

Equipment
The bulk of the equipment at the Center is reasonably modern and appropriately scaled. The audio-visual equipment is quite sophisticated and somewhat underutilized due to inadequate audio-visual tech support. The network hardware is decent, although wireless (WiFi) networking is absent on the residential floors; most student residential buildings would be expected to have WiFi throughout.

Network
Currently the Center has a 100-megabit Internet connection, shared between the three program floors and the eight residential floors. A bandwidth cap on residential network usage was implemented after heavy student traffic began to impact program usage; students are now limited to 20% of the 100-megabit pipe. This change improved the situation for the program floors, but it has made the student experience unacceptable. Network bandwidth for students was cited as the top issue by all the students we spoke with, and most of the faculty and staff.

Issue tracking

Support requests are currently submitted through the building management company's work order system via an online form. The IT team does not have access to the ticketing interface, which limits the value of the current arrangement. Many individuals cited unclear status information and lack of follow-through on outstanding issues as consistent problems.

Audio-visual

The Center has sophisticated audio-visual systems installed across ten rooms. There are four smart classrooms, three conference rooms, one combinable multipurpose room, one auditorium, and one master control room. The IT staff is expected to support these systems from 7:00 AM to 9:00 PM. The team does not currently include a true audio-visual technician; the lack of in-house A/V skills results in sub-optimal equipment configurations and event support.

Recommendations

Our recommendations are categorized by type (Technical, Strategic, Procedural) and level of concern (Critical, Important, Desirable):

Technical Recommendations

Critical: Address network bandwidth
Important: Complete phase 1 of web site project
Desirable: Improve A/V control system and audio programming

Strategic Recommendations

Critical: Hire an audio-visual technician
Important: Focus on direct user contact

Procedural Recommendations

Critical: Implement trouble ticket tracking
Important: Implement a duty phone
Desirable: Set user expectations appropriately

Commentary on "Critical" recommendations:

Address network bandwidth

Internet speed was identified as the top technical issue by the students and by a significant portion of the staff and faculty. Our strongest recommendation is to increase the Center's Internet bandwidth, particularly for the student population.

Hire an audio-visual technician

The audio-visual systems at the Center are extensive and heavily used, with coverage required from 7:00 AM to 9:00 PM. The existing staff lacks the training and background to perform the necessary audio-visual support.Given the quantity of rooms to support, the required hours of coverage, and the complexity of the audio-visual systems, we recommend hiring a full time audio-visual technician.

Implement trouble ticket tracking

The most prevalent customer complaint is inconsistency in follow-through on support issues; lacking a ticketing system, the mechanisms for tracking outstanding work requests are ad-hoc. We recommend implementation of a true trouble ticket tracking system. The Information Systems Manager should be given responsibility for monitoring ticket assignment, response, and resolution in accordance with the appropriate service level agreement.

> "Often I have to follow up with work orders after I have placed them...They are always polite and helpful when they do respond though."
> *—Center user*

Conclusion

Providing IT services at the Center will remain challenging due to high expectations, small scale, and physical isolation. Given limited resources, clear focus is the key to improved outcomes. Delivery should be focused on services which provide direct user contact. Procedural changes will help the team focus on customer service and improve satisfaction levels. The team should focus on building relationships with related units to provide consulting assistance for outsourced projects. The generally positive opinions of the existing IT staff and the generally good quality of Center equipment should act as a solid basis for developing successful IT services.