chapter four

Integrating Academic Technology Services into the Global Network University Library: Six Questions for the Team

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As New York University (NYU) recently opened two new campuses in Abu Dhabi, United Arab Emirates, and Shanghai, China, academic technology services at both locations were launched to support faculty and student curricular and research needs. Consciously situated within the university library, these teams are constantly evolving to support the needs of their start-up campuses. As part of the Global Network University, local requirements must be balanced with the needs of the larger organization. Regular communication with administrators, faculty, and students is essential in making sure adequate staffing and services are in place to provide the academic technology support required of these two campuses. An entrepreneurial spirit and a high degree of flexibility and responsiveness are important traits for delivering effective technology services as well. In this piece, there are six questions posed for the academic technology teams in Abu Dhabi and Shanghai.

Can you start off by talking about the Academic Technology (AT) environments at New York University Abu Dhabi and NYU Shanghai: How did the services come into being and what are their mission and focus?

At New York University Abu Dhabi, the AT department became embedded within the library early on by the conscious decision of library leadership. Initially, the department consisted of a small group of technologists and one librarian at the temporary campus space. This team served the faculty, students, and staff in their use of technology in the curriculum and research by providing support for the campus learning management system (LMS)—formerly Blackboard but now Sakai—procuring software for academic use, maintaining public access computers in the library, and circulating specialized equipment such as digital cameras, laptops, and video equipment. There was an agreement upon startup between the university's Information Technology (IT) department and the AT team that our group would support "above the line" services defined as any forward, client-facing technology needs as mentioned above, while IT would support "below the line" infrastructure needs such as network connectivity and installation of classroom technology. Because of this, there has never been any confusion about the division of campus technology support. Each group is able to focus on providing their core set of services, working within their respective budgets and personnel capabilities.

In 2014, the New York University Abu Dhabi Library would move to its permanent campus on Saadiyat Island. Early in the planning stages, a space was envisioned called the Faculty Resource Center (FRC). This was viewed as an alternative solution to supporting New York University Abu Dhabi faculty with services normally provided by teaching assistants. This would be done primarily in the form of helping faculty build out their course websites, hosted through the university's LMS, by integrating library resources within the system. During the course of planning for the FRC, we realized that we wanted the mission and scope to be much broader and innovative than initially considered. Since the FRC fell under the umbrella of the AT team, it made sense that the space should also be used to assist faculty with their wider technology needs as they relate to teaching and research. Over time, the mission of the FRC became clearer and evolved into supporting faculty in their use of enterprise technology systems such as the university's streaming media service, NYU Stream, Google Apps for Education, and WordPress, our hosted web publishing system.

Outreach in the form of programming and workshops around digital tools became a top priority, as did supporting faculty with any short and long-term scholarship and research needs involving technology, including data services and storage, building blogs and websites to feature their research, and helping them launch research projects by connecting them with various departments and resources across campus. The space was renamed the Center for Digital Scholarship (CDS) to reflect the new set of services. When the Saadiyat campus first opened, there was an IT client services help desk located within the same Campus Center building on a different floor in addition to the AT team's presence in the library at their own service desk. This IT client help desk served as a walk-in destination for faculty, students, and staff to seek help with computing problems such as network connectivity and hardware malfunctions. Shortly after the move to the new campus, it became clear to university leadership that it would benefit everyone to have one single destination for all computing and technology needs. It was decided that the IT service desk would join the AT desk in the library. The new Campus Technology Center (CTC) within the New York University Abu Dhabi Library provides a single service point for all computing needs across campus. With the CTC and the CDS in place, a natural division of services has emerged, with the CDS offering more specialized technology assistance for faculty as it relates to digital scholarship and the CTC assisting users with basic operational needs.

Opening a few years after New York University Abu Dhabi, New York University in Shanghai launched the Academic Technology Services (ATS) department which was conceived as three service teams: computing, classroom media, and faculty technology. The computing team supports library IT needs, library computer labs, and a digital media center. The classroom media team supports classroom presentation technology. The faculty technology team supports faculty and student use of technology in the curriculum and will eventually develop to support a digital humanities program. The overall model follows practice at New York University Abu Dhabi while also incorporating elements of NYU New York's Information Technology Services department structure.

ATS was to launch in September 2014 to coincide with the opening of a dedicated building in the Pudong district of Shanghai. However, at the urging of our local partners, NYU Shanghai actually opened in September 2013 with a temporary space in three buildings on the campus of East China Normal University (ECNU), the Chinese university partner of NYU. ATS consisted of a single staff member, augmented for a few weeks prior to opening by a staff member from the NYUAD campus. Due to the early opening all technology services were staffed thinly, but IT was in better shape with several contract staff to provide first-tier support, as well as three directors and managers to lead strategy, infrastructure, and client services. In the first year of operation, nearly all ATS functions were actually staffed and managed by the NYU Shanghai IT department. During that first year, ATS focused on preparing the new Pudong academic building for teaching and learning activities to begin in September 2014.

With the opening of the academic building, ATS undertook support for library technology, classroom presentation technology, classroom computing (added in Spring 2015), teaching and learning technology, and technology-enhanced educational initiatives such as experimental and innovative courses. ATS also coordinated computing support for research, electronic textbook services (as NYU Shanghai is predominantly digital), academic software licensing, enterprise technology systems such as NYU Classes, NYU Web Publishing, NYU Stream, and a host of other services. The first year in the Pudong academic building was the second year of operation for NYU Shanghai, thus service expectations were high, especially with respect to support for teaching and learning. Those expectations drove much of the service expansion and direction in the second year, with many of the services and support offered at New York University Abu Dhabi used as templates for similar offerings at NYU Shanghai.

It seems like assembling an effective team has been really central to your efforts. Can you discuss how you have built the team?

From the beginning there have been two parts to assembling an effective team at New York University Abu Dhabi: organizational planning followed by hiring strategies that work towards these plans. Since the opening of the university, we have had a clear understanding of the mandate of the AT team and its placement within the organization reporting to the Provost. We knew that our mission is to support the curricular and academic needs of the university and not the operational needs for which IT is responsible. This allows us to have a very clear hiring strategy to focus on our specialized needs. We also knew the approximate number of students and faculty we would be serving on day one and then each year after, which helped us to plan for scaling our staff respectively. We could start with a smaller team and then hire each year to meet increasing needs, pending staffing budgetary allocations.

In hiring our core team, we look for individuals who are comfortable with ambiguity. We view this as an essential trait given our startup existence where there are not always ready answers and academic needs are constantly changing. Since we had such a small group to begin with, it was important that we hire people with an entrepreneurial attitude, people that are willing to do whatever it takes to get the job done, regardless of whether or not it is actually part of their job description. It is not uncommon for a member of our team to learn a new skill as needed, whether it is software they have never used before or a new piece of equipment requested by faculty, in order to provide support around these new technologies. Beyond year one, we increased staff in conjunction with the growth of student enrollment and faculty recruitment. Between years one and two, we had a 50 percent increase in population and we dealt with significant increases each following year. We went through four distinct cycles of growth as we brought new students onboard and encountered various needs from these new populations. For example, freshman technology needs differ from the activities of seniors, as we learned when we were asked to archive senior capstone projects. We had never dealt with this task before and had to work quickly to develop a workflow and infrastructure to meet this new requirement.

The NYU Shanghai organizational planning was driven by library leadership in New York and was informed by strategic planning for the Global Network University (GNU) library and the New York University Abu Dhabi experience. Staffing plans called for a mix of Chinese and international hires over two years. Both international and local recruitment has been challenging for several reasons, including high housing costs in Shanghai, travel distance from family for relocated expats, and the need for staff to possess both the required technical skills and high proficiency in English. Additionally, competition for staff from the for-profit sector is fierce in the region. Recruitment of Chinese students returning home from U.S. graduate programs has met with some success.

What do you think the challenges and benefits of collaboration between the three portals campuses have been?

One of the major challenges in a network university like NYU is balancing local needs versus global requirements. While it can be beneficial in many ways to use the same systems, tools, and technologies across all university locations (the university LMS being a good example), each campus has its own distinct set of needs, complexities, mandates, and funding levels that sometimes necessitate unique solutions. Determining when to implement a local solution versus a global one is not always clear. For example, it makes sense to use the same LMS across campuses, but building an infrastructure for data storage has to take local requirements into consideration while also considering the need for global connectivity among faculty and students.

Other challenges to working collaboratively across the global network university are more logistical. Communication across campuses can be difficult given the difference in time zones. For example, the Shanghai campus does not share any working hours with the New York campus, so trying to connect in meetings or even reach someone via email within your own workday is not always possible. Despite best efforts to connect virtually with tools like Skype, varying network capabilities can sometimes cause problems for online meetings when calls are dropped or the connection is deficient.

In spite of the challenges, there are several benefits that collaboration across portal campuses provides. Staff from the Abu Dhabi and Shanghai campuses sit on committees in New York to ensure that there is local representation and a voice for their own university constituents. In doing so, we foster relationships among staff members across campuses as we all work towards common goals. This interpersonal communication has proved incredibly useful since it puts a friendly face to the person we might be emailing about a troublesome issue down the road. These personal connections among staff members are crucial to building effective team[s] and smooth operation[s], making collaboration among international colleagues a high priority at all campuses.

There are financial and logistical benefits of collaboration as well. Sharing applications globally allows users to have a seamless technology experience when moving between campuses and sites. A professor teaching in Shanghai is using the same LMS as her colleagues in New York, as are the students, thus there is no need to relearn a new system at each location. The libraries acquisition of e-books is another area of successful sharing and collaboration across the university. These resources are available to all of our international users, regardless of their location, since they are not bound by a physical shelf location. We are also able to leverage NYU's global reach when negotiating licenses for software. Instead of having three site licenses for a software program, we are often able to have a standard global license that all three campuses contribute to financially.

Can you talk about the kinds of hardware and software that you have chosen to acquire, how you made those decisions, and any challenges you have seen in your approach?

In acquiring software and equipment at New York University Abu Dhabi and NYU Shanghai, we choose what is directly related to research and curricular needs. We regularly speak to deans, faculty, and students and even review syllabi each semester to determine exactly what is needed for teaching and research and then select products accordingly. We try to ensure that we have licensing in place to support whatever the disciplines need in time for the beginning of the semester, and then we try to obtain global licensing when it is recognized that everyone in the Global Network University could use it. Our team often consults with the New York IT department to see if there are NYU pricing structures in place for larger software packages such as Adobe Creative Cloud or MatLab. We coordinate local licenses for smaller, niche, software that will mostly be used by our own students and faculty for specific courses. While our services and equipment are often modeled after those offered in New York, at New York University Abu Dhabi we offer services and equipment outside the norm due to locational constraints and what might be available (or not) locally. For example, a student in New York who needs photos printed for a class project, or a faculty member who requires a large poster printed for a presentation, have numerous places to find services like these at the local copy or print shop in New York. Here in Abu Dhabi we do not always have shops offering these specific types of services, so the AT team often fills the gaps where we can by providing them in the CDS or CTC. In turn, this allows us to market ourselves beyond traditional expectations, hopefully driving more traffic into our spaces.

Additional challenges extend to procuring supplies. It can sometimes prove difficult to find the supplies or equipment we need here in Abu Dhabi, since these require an international shipping and related costs. We have to plan far in advance to make sure we have what we need to support our services. However, given the rapid expansion of both New York University Abu Dhabi and NYU Shanghai, and the startup environment in which we exist, we have had to remain extremely flexible in the hardware and software that we procure as well as the services that we offer. If a new major is suddenly announced, we must be able to respond to those needs quickly. Given these challenges, we might struggle to support our users if we do not know about these changes far enough in advance, despite our best efforts to remain informed.

NYU Shanghai faces its own set of unique challenges, including adherence to strict policies regarding competitive bidding and purchasing, which can have far-reaching implications for vendor selection, project timelines, overall program costs, taxation, and budget cycle planning. The campus is very sensitive and responsive to faculty and student needs arising from temporary residence in China. For example, an Apple laptop purchased in the United States cannot be serviced under warranty in China, and purchasing new or replacement technology can be very problematic due to language, financial, and logistical barriers.

Moreover, departmental budgets are not so large that they can purchase enough equipment for all their students. It does not make organizational and financial sense for multiple academic departments to purchase the same equipment. Therefore, the AT team offers a substantial supply of loaner laptops, cameras, microphones, portable hard drives, projectors, and more that students and faculty may use to develop curriculum and complete coursework.

Staff at Abu Dhabi and Shanghai have become a resource and network for each other. Can you give us your perspectives on each other's situations, and how they have made you think about your own services and how you can best collaborate?

Since New York University Abu Dhabi had already been open for three years prior to the Shanghai campus opening, the NYU Shanghai ATS team was able to draw upon this start-up experience when implementing their own procedures and service models. NYU Shanghai leadership and staff learned and benefited from the many positive outcomes of New York University Abu Dhabi's opening and were able to avoid any potential missteps that may have occurred along the way. In many ways, New York University Abu Dhabi is a model for Shanghai in that it gives the staff a glimpse of what might also be created there. Ron Berry's visit to NYU Shanghai from Abu Dhabi proved fruitful in envisioning services in Shanghai, among them unified technology support services with a shared service point, vision, and focus among the New York University Abu Dhabi team.

Collaboration among all campuses is possible when everyone shares the same vision of supporting our students, faculty, and staff. While the support models might be slightly different due to the diversity of our respective student populations, it is clear among the staff that we are there to enable students and faculty in their use of our various enterprise systems. Regardless of location, they will be able to get the help they need with navigating the LMS, receiving instruction in incorporating clickers (or interactive technologies for classroom response system) into the classroom, or any other essential service. Continuous communication between support teams ensures that we are made aware of any new changes to tools or potential launches of new systems so that we can pass this information onto our faculty and students in a timely manner.

Both campuses started with small temporary campuses, but have since moved into larger, permanent spaces. Can you talk about how you plan and adjust to growth in the new facility with additional students, faculty, and staff?

At New York University Abu Dhabi, we had a clear understanding of the plan for the university in terms of the maximum number of students and faculty we would eventually need to support. The goal is to have 2500 students enrolled at maturity, including graduate and undergraduate students. As a result, the university was able to build a new facility to support us at peak enrollment, including proper seating capacity, an appropriate number of service points, classrooms, adequate audio-visual services, and IT infrastructure across campus. In Shanghai, there is a similar understanding of the eventual student population. However, the total number of people who will be engaged in teaching, learning, and research is not yet clear.

At both campuses, the AT teams understand the importance of staying in touch with the deans to know where the curriculum may be heading in order to be able to respond to changes in a timely manner. Since both campuses are still maturing, it is possible that new majors may be added, old ones revised, and new areas of research developed. Both teams have to remain flexible in their approach to emerging technology service needs while also being comfortable with the unknown. The future of our campuses are, in large part, a function of how well we provide services to enable the growth that we want to see, making it essential to align our growth as best we can to support the goals and visions of the university as expressed by the Provost and senior administrative leadership.

Biographies

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Brian Lewis is Associate Director of the Library and Director for Academic Technology Services at NYU Shanghai. Brian manages a team of technology specialists supporting teaching and learning activities at the university.

Beth Russell is Head of the Center for Digital Scholarship at New York University Abu Dhabi and is responsible for daily operations and long-term strategic planning in the CDS. She manages a space and supervises staff dedicated to supporting the library and the curricular and research technology needs of faculty and advanced researchers while developing, promoting, and managing digital scholarship programs and initiatives in partnership with faculty interests.