

ITPC Report 2022-2023

This report summarizes the activities and recommendations of the 2022-2023 Information Technology Policy Committee (ITPC).

Submitted: 2.8.23

Charge to the Committee

Background to the Charge

This Committee shall be concerned with all questions relating to the development, maintenance, security, and availability of information systems and infrastructures.

The Committee periodically reviews information systems priorities, policies, resources, and operations and, based on these reviews, makes recommendations concerning activities that may improve operations or enhance the seamless flow of data and information to the communities that depend on it.

The Committee also makes recommendations to the Senate Agenda Committee, the administrative head of Information Systems, or to others in the administration (as appropriate) on matters concerning operations, resources, or policies.

Committee Charges

1. The Faculty Senate has received numerous faculty concerns related to perceived lack of information/communication related to technology infrastructure updates in the classroom/remote teaching and in research platforms. The committee should work with Information Technology Services (ITS) (Cole Campese), Center for Advancement of Teaching, Learning and Research (CATLR) (Michael Sweet), and Academic Technology Services (ATS) (Lindsey Sudbury) to identify best practices for targeted and coordinated communication strategies, specifically:
 - a. Evaluating available ITS, CATLR and ATS websites
 - b. Identify specific areas where faculty can go to find relevant information and design an easy-to-use interface/infographic
2. As the university continues to re-evaluate plans for remote and hybrid work, the committee shall:
 - a. Identify current processes of work/office space allocation and technology infrastructure needs and upgrades (i.e. computers, software) across all colleges
 - b. Recommend best practices and considerations to apply across all colleges and campuses to ensure equity across all faculty positions

Membership

- John Wihbey (Committee Chair) - CAMD
- Lynda Hodgson – CPS
- Xiaoping Liu – DMSB
- Brian O’Connell - COE
- Boris Yelin – CSSH
- Cole Camplese - VP-IT and CIO; ex officio

Charge 1 – University Websites

Evaluate available ITS, CATLR and ATS websites. Identify specific areas where faculty can go to find relevant information and design an easy-to-use interface/infographic.

Pursuant to Charge 1, ITPC examined the issue of web-based communications about classroom technology changes. ITPC also leveraged the annual survey through the Faculty Senate to assess specific problems with university websites broadly. As the CIO noted to the ITPC members, many websites are operated by central marketing and communications, college communications, and individual departments/units; and some websites and applications are structured according to the specifications of external vendors. As a result, ITPC elected to re-focus this charge to the following:

Charge 1 (revised). In collaboration with the CIO, examine recent changes to ITS-supported websites that provide information on classroom technology. Further, investigate opportunities regarding promoting more uniform standards and user interface patterns across all university websites, acknowledging that while websites may be operated by different internal stakeholders, for most users such ownership distinctions are often meaningless; broken links and outdated sites, for example, reflect poorly on the institution as a whole. ITPC seeks to spotlight general ways that the university web community can improve as a whole to advance goals of access, logical navigation, and ease-of-use.

This revised charge allowed the committee to make specific observations about classroom technology communications, per the original Charge 1. It also allowed broader observations about wider web properties based on the data in the Faculty Senate survey.

Through our research, we learned of the following concerns:

1. Faculty report numerous problems in trying to figure out the real-time status of their teaching classroom with respect to technology. Many are not sure where to go online to

ascertain what is going on in their classroom, and ITS sometimes changes technology setups without coordinated communication with the relevant faculty member.

2. Faculty note that IT Tickets and related documentation are not easy to get back to/retrieve.
3. Faculty report numerous broken links across collective Northeastern websites, a problem getting worse by the year.
4. Faculty state that search functionality on the university website is not useful.
5. Many Northeastern web properties have been identified as having user interface challenges.

Through our research, ITPC all learned of the following solutions being implemented by IT, which are responsive to some of the above concerns:

1. The new Personalized Classroom Dashboard was recently released. This dashboard is available in ServiceNow for faculty to review the health of their classrooms. An instructor would simply log into the ITS ServiceNow portal (<https://service.northeastern.edu/tech>) to see the specific room(s) assigned to that faculty member. In the future, the health of the IT related equipment will be made available on the Employee Hub, (<https://me.northeastern.edu>), which is a personalized portal designed to replace MyNortheastern. In the future an instructor would receive a push notification that will indicate the health of their specific room.
2. In addition to the personalized dashboard, faculty now can view online all classrooms in Boston and see what equipment each room has installed and review all training materials. To view all classrooms, please visit the Classrooms at Northeastern site (<https://service.northeastern.edu/tech?id=classrooms>). This site is also currently being updated to provide faculty with ITS's newly documented classrooms standards.
3. To address the issue of IT ticket access and retrieval of documentation, all ITS and HR tickets are now available at the new Employee Hub (<https://me.northeastern.edu>).

ITPC Recommendations

1. ITPC recommends that ITS continues to work with faculty users to ensure the Personalized Classroom Dashboard is accessible and easy to find/use.
2. ITPC recommends that ITS continue to work to make classroom status available to faculty at all campuses (those beyond Boston) at the Classrooms at Northeastern site.
3. ITPC recommends inviting Northeastern University External Affairs to explore a working group in concert with the CIO to help examine the general websites problem.
4. ITPC recommends a university-wide convening of those with website oversight responsibilities to focus on brand, navigation, and accessibility issues relating to websites.
5. ITPC recommends that ITS investigate automated solutions for dealing with broken links and/or outdated sites, resulting in notifications to relevant web managers and communications/marketing stakeholders in the colleges.

6. ITPC recommends that as part of the potential greater standardization of university websites, navigation should be a major consideration.

As relevant background to this Charge and these Recommendations, ITPC also provides the following courtesy of the CIO:

While ITS and the Office of the CIO provide much of the supporting infrastructure that supports the public facing websites of the university, ITS does not build and maintain most web properties. ITS maintains its own set of webpages that are designed for communication, support, and overall information.

For example, college-level websites are often a collaboration between ITS, for supporting infrastructure and backend integrations, External Affairs, and the college itself. External Affairs coordinates brand and style adhesion, while more times than not, the college works with a third party to design and develop their web properties. ITS will review all new websites for both accessibility and information security.

To overcome some of these issues, ITS has implemented Sites at Northeastern (<https://sites.northeastern.edu>), that provides pre-built templates that can support various website types. Currently, Sites at Northeastern has full template sets for Portfolios, Labs, Business Units, Conferences, Campaigns, and Clubs. Each template adheres to the overall brand strategy set by External Affairs. The overall platform allows for very simple site creation, with only a few clicks, and is built on a managed WordPress content management platform.

There is not an existing process by which all Northeastern websites are managed under one umbrella. New, large-scale websites (post-2021) do flow through a “digital governance” process where both the Office of the CIO and External Affairs provide support, recommendations, apply guidelines, and in some cases build sites. When this occurs, the appropriate metadata is provided so that sites can be better discovered by the NU web search.

The recently developed Employee Hub (<https://me.northeastern.edu>) is a personalized portal designed to replace MyNortheastern. The user interface has been greatly enhanced and is continually updated with new features. The new Employee Hub was “soft launched” at the same time as Workday HR. Later this spring ITS will deploy a campaign to fully release the Employee Hub along with a timeline for the ultimate shut down of My Northeastern. All employees can access the Employee Hub today. The Employee Hub is personalized to your overall needs, with access to calendar, email, cloud documents, ServiceNow support tickets for both HR and IT, and other frequently used applications. It also has a reimagined Resources page that will be the replacement for My Northeastern.

The Office of the CIO will do a full review of ITS-controlled websites on an annual basis to make sure information is more easily discoverable. This will include all public-facing pages that are not built into licensed software. For example, ITS can easily make changes to its homepage, but cannot influence the design of the Workday landing page as that is owned and maintained by Workday itself.

Charge 2 – Classroom Technology

Identify current processes of work/office space allocation and technology infrastructure needs and upgrades (i.e. computers, software) across all colleges. Recommend best practices and considerations to apply across all colleges and campuses to ensure equity across all faculty positions.

ITPC and the CIO mutually agreed that space allocation is outside the scope of this committee work or the control of the CIO. Therefore, Charge 2 was shortened to:

Charge 2 (revised): Identify technology infrastructure needs and upgrades (i.e. computers, software) across all colleges. Recommend best practices and considerations to apply across all colleges and campuses to ensure equity across all faculty positions.

Pursuant to Charge 2, the ITPC team learned the following from data in the Faculty Senate Survey:

1. Faculty have identified the following issues with respect to classroom technology: Lack of consistency across classrooms; overdesigned/complex technologies; need to support Zoom as an alternative to Teams; outdated classroom desktops; NUWave wireless weak or inconsistent, disrupting key moments like exams, which often happens because of the number of devices accessing the network simultaneously.

Pursuant to Charge 2, the ITPC team learned from Cole Campese (VP-IT & CIO; ex officio member of ITPC):

1. Improvements: ITS is engaged in year two of a five-year program to completely modernize the physical network across the global sites. In year one, all outside plant work was completed, including running new fiber to buildings to greatly enhance throughput. This year ITS is replacing hundreds of wireless access points that have been a significant bottleneck in the movement of data in our classrooms, leading to significant access, quality, and reliability issues. The new wireless access points will be able to support more than 10 times the number of connections in each room to account for the massive rise in Internet connected devices that students carry.
2. As mentioned in Charge 1, the new Personalized Classroom Dashboard was recently released: <https://service.northeastern.edu/tech>. Faculty now can see all Boston classrooms at: <https://service.northeastern.edu/tech?id=classrooms>.
3. Global Learning Spaces: The latest approach to learning space design is powered by the combination of Canvas, Microsoft Teams, and managed Microsoft Teams equipment. The vision of the Global Learning Spaces initiative is to radically simplify the overall use of classroom technology, to make it as intelligent as possible, and to make it a consistent experience across the global network. To utilize a Global Learning Space most effectively, an instructor simply links Canvas to Teams via a custom integration that has recently been deployed. Once this has happened in the background, an automation occurs that creates a Microsoft Teams space, controls access to only students on the roster, and creates

calendar entries for each class. If the roster changes, the invites are updated, and access is dynamically modified. An instructor teaching in a Global Learning Space simply walks into the room and will tap “Join” on the in-room panel. That activates everything in the class and the faculty member can then join the class from their personal device (laptop/tablet/phone) and wirelessly share their screen. Faculty can also allow students in the room or who may be remote to also share their screen to show their work. Today, there are Global learning spaces found throughout the network: 22 in Boston, 20 in Oakland, four in Vancouver, two in Seattle, one in Burlington, four in Arlington, and four in Miami. Global Learning Spaces will be the preferred design going forward. The CIO sees far fewer issues with these spaces than with more traditional classrooms. The combination of modern technology, simplicity gained by removing the in-room PC, and the managed service that monitors the health of rooms in the background will create a much more elegant and usable environment for teaching and learning.

4. Relating to equity issues across all faculty positions: To overcome the reality that many faculty members do not have laptops or tablets provided to them by the university, ITS is taking several steps. The first is the laptop and tablet loaner pool. Devices can be checked out at Snell Library for use by instructors. The second, longer term strategy is to move to a more centralized model of managing laptops and tablets. This would move most of the purchasing, management, and lifecycle of the machines to ITS.

ITPC Recommendations

1. ITPC recommends that the IT Council works to accelerate the refresh of the global learning classrooms.
2. ITPC recommends that the IT Council re-examine the distinction between Registrar-controlled and locally controlled classrooms. There are potential efficiencies to adding more classrooms to the Registrar-controlled category.
3. ITPC recommends that all teaching faculty/instructors, including part-time faculty, be provided with Northeastern-issued devices in order to ensure quality of education for all students, regardless of the employment status of instructor. This system would ensure equity across all faculty positions. We recommend investigating a system where devices could be issued on a semester basis for part-time faculty. We acknowledge that, given the number of part-time faculty, this may be difficult. However, we recommend using an equity lens to approach the problem, prioritizing faculty in need. In terms of which campuses this would apply to, we recommend a feasibility assessment by ITS as the first step – a cost estimate that would be shared with the IT Council.
4. With the aim of getting ITS and faculty to work together to better to maintain classrooms collectively – joint stewardship – ITPC recommends more proactive communication with faculty before the semester regarding how individual classrooms are designed. We also recommend that ITS encourages, and actively communicates with, all faculty to test equipment prior to the first day in partnership with ITS technicians. We recommend multiple email communications to help achieve better collective stewardship and experience for students, faculty, and technicians alike.

As a relevant background, we provide the following courtesy of the CIO:

Classroom Information and Background

On the Boston campus, there are 279 Registrar controlled classrooms. Of these rooms, 180 of them have been refreshed based on the 2020 standards. Last year, all those classrooms received an improved classroom control interface, designed in partnership between faculty and ITS staff to be more user friendly as well as contain the “SOS” button that dispatches an instructional assistant in four minutes or less. The remaining rooms are in various states of technology upgrade. Many of these rooms are scheduled to be upgraded over the next several years.

Other than classrooms, ITS also assists in the design, maintenance, and training across hundreds of conferences rooms. Finally, we are seeing a growth in the installation of other types of purpose-specific learning spaces such as Maker Labs and XR/AR Labs.

In addition to these rooms there are numerous departmental and college-controlled learning spaces that are not managed by ITS. These rooms are managed locally and ITS does not provide funding for new or refreshed technology.

Outside of Boston, there are 56 additional classrooms in the Global Network, with an additional 36 that have come online at our new Oakland campus.

As of this writing, the Office of the CIO is making recommendations to the IT Council (a senior leadership working group focused on university technology issues) to consider various approaches to accelerating classroom upgrades and setting a 5-year lifecycle on IT and AV equipment. There are two primary considerations: the first is available funding; and the second is the very limited availability of classrooms to do upgrades, because they are constantly needed for teaching. The Boston campus is so busy all year that it is incredibly difficult to take even a small number of classrooms offline.

In addition, the CIO will discuss with senior leadership the impact of moving more non-registrar-controlled rooms into the schedulable pool of learning spaces to provide a greater number of spaces available more broadly.