

TO: Senate Agenda Committee

FROM: Information Technology Policy Committee

DATE: 3/6/2024

SUBJECT: Final report from Information Technology Policy Committee

The ITPC committee convened bi-weekly throughout the academic year, tasked with three specific charges by the Senate Academic Council. To effectively address these mandates, the committee was divided into three groups.

Committee Charges for 2023-24

1. Review the status of the migration of various university web services to me.northeastern.edu and provide feedback on the accessibility of resources for faculty to the Senate and the Chief Information Officer. (Professor Peter Tarasewich -DMSB))
2. Review progress toward providing access to classroom technology and research computing resources across the Northeastern global network and provide prioritized recommendations for improvement to the Senate and the Chief Information Officer. (Professor Jay Spitulnik, Khoury, and Professor Stephen Golden, DMSB)
3. Advise the Senate on developments in artificial intelligence as they may affect university teaching and research, and if appropriate, recommend any policy changes to the Senate and the Chief Information Officer.  (For example, should Northeastern allow access to Google Bard?) (Professor Shachi Winton, CPS, and Professor Balazs Szelenyi CPS)

**Membership:**

Balazs Szelenyi (Committee Chair) - CPS

Tarasewich, Peter - DMSB

Shachi Winton – CPS

Stephen Golden -DMSB

Jay Spitulnik -Khoury and BCHS

1. **Charge 1 – University Websites**

*Review the status of the migration of various university web services to me.northeastern.edu and provide feedback on the accessibility of resources for faculty to the Senate and the Chief Information Officer.*

**Background**

This charge looked at the current functionality and usability of the Employee Hub (the Hub), which is a replacement for MyNortheastern. The Hub is intended to be a customizable gateway to all online resources that Northeastern employees need to support their job-related activities. The 2022-2023 ITPC Report contained a comment from the University CIO at the time:

“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.”

**Methodology and Approach**

The current design and capabilities of the Employee Hub were studied from the perspectives of the ITPC members. Questions about the use of (and satisfaction with) the Hub were included in the recent faculty survey. We intended to meet with people who designed and/or maintain the Hub to better understand the rationale behind its current implementation. The results of these activities are summarized below, followed by Committee recommendations for improving the Hub and meeting faculty resource needs.

**Findings:**

1. The Hub is implemented in Microsoft SharePoint. Users are redirected to <https://northeastern.sharepoint.com/sites/EmployeeHub>. Once a user is logged in, they are greeted with their photo, name, NUID, the weather, and tabs that allow the display of the user’s calendar, recent emails, or task lists. Under the NUID is a link to account settings. To the left of the user information are small icons that lead to a) a list of recently or frequently visited Web sites, b) recommended northeastern news articles, c) recent files, d) personal lists, and e) one-click creation of different Microsoft documents. At the top left of the page is an icon to a menu of all of Microsoft’s online products. Next to this is a link to SharePoint. “Northeastern University” (which links back to the Hub) and “Employee Hub” (which links back to the Hub) are directly above the user’s photo. Smaller links to the right of these lead to SharePoint communities, Northeastern news and events, and to Resources. The Resources page is similar to MyNortheastern, and allows access to University tools such as Banner, TRACE, classroom scheduling, grade changes. Below the user’s photo are a set of large icons for applications such as Office 365, Workday, Outlook, Canvas, To Do, Concur, and Tableau. Clicking a small pencil icon above these choices allows the user to choose which application icons to display (out of about 25 total choices). Below the application icons is a section for LinkedIn learning courses. The next section contains lists of recent and shared documents, service requests, and links to HR services and IT services. The bottom right contains links to the IT Service Desk and a short survey (3 questions) requesting feedback about the Hub and whether the user would like to volunteer to be a Hub contributor or participate in a focus group.
2. ITCP reached out to Interim CIOs Karen McCarthy and Marcus Robinson asking to meet with them to discuss the Hub or recommend the best person(s) to contact concerning its design, implementation, and maintenance. No response was received.
3. Based on the Fall 2023 Faculty Survey (distributed by the Faculty Senate), about 49% of respondents (203/415) use the Hub daily or several times a week. Only 6 people responded that they had never heard of the Hub before the survey. Over 90% of respondents (371/415) stated that they did **not** access their email through the Hub (preferring to use Outlook or another tool directly). 13% of respondents (54/415) stated that they use the Calendar feature in the Hub. 10% (41/415) used the news and events feature. Less than 4% (17 or fewer out of 415) used the task lists or the communities features.
4. When asked about specific university software or systems used once or more per year, 80% or more of respondents (332 to 365 out of 415) indicated Office 365, Concur, Banner, and Workday from a list. The library’s website was used by 57% (236/415) and classroom scheduling by 35% (144/415). Other write-ins included Salesforce, Adobe, Canvas, and facilities requests. 69% of respondents (264/382) find it easy to use the Hub. 31% (118/382) do not. But 31% (75/244) find it easy to customize the Hub, while 69% (169/244) do not.
5. When asked for any additional comments about online resource use of availability, the responses were quite varied, but essentially all were negative. Respondents repeatedly expressed disdain for the Hub. Faculty want the quickest and easy way to get to the applications they need. One comment that seems to sum up this sentiment is “nobody wants a hub. We want a simple page with a list of links to all the many absurd ITS tools we need to use. I don' t need a picture of me, or integration with my mail, or suggestions about linked in learning. Just a fast way to get to stupid workday, banner etc.” Faculty input into system choices was cited by multiple respondents. One person stated “It would be nice if faculty, staff, and other end users had more of a role in designing new or revised systems.” Respondents also expressed frustration with changes to systems perceived as unnecessary or counterproductive. Says on person, “Stop trying to improve things! It only makes them worse!”

Recommendations:

1. The ITPC still needs to better understand the factors behind implementation of the current Hub. How was the need for a portal determined? Was there a documented demand or reason for one? Were different alternatives and designs evaluated? Different software packages? Who is maintaining the Hub and addressing any user concerns?
2. Research into the portals, software, and websites of other universities may provide useful insights. This is something ITPC might also pursue.
3. The current Hub should be reevaluated by ITS with faculty input. There may be additional input already available through the Hub surveys. Run focus groups and conduct formal user testing (or have any been done already?).
4. Instead, or in parallel, consider creating a linktree ([linktr.ee](file:///C%3A%5CUsers%5Cb.szelenyi%5CAppData%5CLocal%5CMicrosoft%5CWindows%5CINetCache%5CContent.Outlook%5C751Y5RQO%5Clinktr.ee)) or something similar that provides faculty with direct links to the tools they need the most. Add brief instructions or comments with the links (to minimize the need to go to a separate help page for instructions).
5. Provide sufficient training on key University systems for new faculty upon onboarding.
6. If or when new software is introduced, provide transparency about the reasons for change.
7. **Charge 2 – Classroom Technology**

*Review progress toward providing access to classroom technology and research computing resources across the Northeastern global network and provide prioritized recommendations for improvement to the Senate and the Chief Information Officer.*

**Background**

This charge is focused on the overall learning experience in classrooms for faculty and students and includes four specific recommendations to the Faculty Senate and the University CIO made in 2023. After the recommendations were recorded, there has been a change in both the University CIO role and in the registrar’s office. This committee spent hours reconstructing the current condition of each of the recommendations followed by updated recommendations from this committee.

* 1. **C Recommendations & Current Condition as of March 2024**
1. ***(22-23) ITPC recommends that the IT Council works to accelerate the refresh of the global learning classrooms.***
	* (23-24) Finding:
		+ In meetings with the Interim CIOs Karen McCarthy and Marcus Robinson and Assoc Provost Eric Stewart, we determined that:
			- Of the 294 classrooms in Boston, 40 have been converted to Global Learning Spaces (GLS).
			- There is no written plan currently for converting the remaining NUFLEX classrooms to GLS.
			- Rooms are converted based on availability; on average, four to six rooms are converted annually.
	* **2024 Recommendation:**
		+ That a faculty representative be added to the IT Council (<https://cio.northeastern.edu/it-governance/>)
		+ That there be a written plan for rollout of GLS rooms including criteria for room selection for conversion.
2. (22-23) ***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.***
	* (23-24) Finding:
		+ In meetings with Rebecca Hunter, Assoc Vice President & Registrar we determined:
			- There are 279 Registrar-controlled classrooms.
				* There was no advancement in the merging of classrooms under the Registrar.
			- Classrooms are assigned based on historical capacity.
			- The Registrar’s office is implementing (beginning in Oakland) classroom management software designed to match the instructor's pedagogy with the rooms.
	* **2024 Recommendation:**
		+ Faculty representatives be added to the process of implementing classroom management software at all campuses.
		+ Faculty given advance notice of which room and equipment they will use for the upcoming semester and where appropriate be notified of new technology and anything they might be unfamiliar with.
3. (22-23) ***ITPC recommends that all teaching faculty/instructors, including part-time faculty, be provided with Northeastern-issued devices 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.***
	* (23-24) Finding: In meetings with the Interim CIOs Karen McCarthy and Marcus Robinson, and Assoc Provost Eric Stewart, we determined that:
		+ CATLR distributed a limited number of devices for professors who signed up for training in GLS classrooms.
		+ A limited number of university laptops are distributed upon request and need-based.
	* (23-24) Finding: In a Faculty Survey distributed by the Faculty Senate to 3,000 Faculty, with roughly 420 responding, we learned:
		+ 28.81% (121/420) have taught in a GLS classroom.
		+ Even split into lecture and team-based pedagogy
		+ Strong interest in a permanent standardized classroom computer
		+ Missing or broken cables and equipment are common problems.
		+ Difficulty connecting personal devices, HDMI connectivity issues, and screen mirroring or extension challenges.
		+ Faculty is often surprised by changes in equipment without notice.
		+ Disappointment with the absence of quick setup guides, inconsistent support from university IT services, and a lack of communication regarding the technology’s benefits and setup
	* **2024 Recommendation:**
		+ Guarantee that the HDMI cable is permanently fixed in every room and provides instant access to the panels.
		+ Add a permanent guide on using appropriate equipment in every classroom.
4. (22-23) **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 before 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.**

**(Per the CIO: The refreshed 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.)**

* + (23-24) Finding: In meetings with Rebecca Hunter, Assoc Vice President & Registrar, we determined:
		- The registrar's office is creating a new team to track rooms and recommended that the team liaise with a faculty representative.
	+ (23-24) Finding: In meetings with the Interim CIOs Karen McCarthy and Marcus Robinson, and Assoc Provost Eric Stewart, we determined that:
		- A faculty representative should be added to the classroom redesign team.
	+ (23-24) Finding: In meetings with Ryan Bender, Direct of Digital Solutions, we learned:
		- Classroom IT Support has been outsourced (effective fall 2023)
		- The new Classroom Support Team (CST) is larger and more proactive.
			* IT has implemented proactive software that checks existing classroom equipment for functionality before 8 AM each day
			* The CST does not work in the evenings and has limited weekend support.
		- Classroom tickets are tracked.
			* The committee repeatedly requested access to the Classroom Data report for analysis but never received it.
			* The faculty does not have access to classroom ticket data, incidents, and actions resulting from an incident.
			* Faculty reported (in the faculty survey) that IT first line support was ineffective and that often incidents were not properly resolved for weeks or months.
		- CATLR has developed a series of classroom training workshops on the university website.
		- CATLR has developed a series of training videos that are available on the university website.
	+ (23-24) Finding: In a Faculty Survey distributed by the Faculty Senate to 2,000 Faculty, with roughly 420 responding, we learned:
		- There are no instructions/user manuals in the classroom – Professors assigned to GLS should be notified before class starts and given a guide (guides should be simple and short)
		- Common issues included unreliable technology, difficulties with Teams interface, problems with sound when sharing screens, and inadequate classroom equipment.
		- Some rooms had persistent issues with connectivity and device integration.
		- Many respondents called for better support and preparation for faculty using these spaces, noting that consistent technical problems led to wasted class time.
		- Desire for More Proactive Support: There were suggestions for more proactive support, such as checking classrooms for functionality before the commencement of each semester, to reduce the need for emergency IT calls.
	+ **2024 Recommendation:**
		- Faculty representatives to be added to the classroom technology design and implementation process.
		- Establish a dedicated staffed training room that is up-to-current with all technology configurations that faculty might encounter.
		- Establish a comprehensive communications plan that defines what must be communicated about classroom technology, how it should be communicated, who is responsible for the communication, who should receive the communication, how often it should be communicated, and what media should be used.
		- Faculty must be given advance notice of which room and equipment they will use for the upcoming semester and, where appropriate, be notified of new technology and anything they might be unfamiliar with.
		- That the ITPC be provided access to the classroom service ticket report for analysis and tracking of repairs or modifications.
		- The aforementioned “SOS” button for IT assistance be installed in all classrooms.
1. **Charge 3: Developments in Artificial intelligence as they may affect university Teaching and Research**

Methodology and Approach: In our comprehensive study, the ITPC crafted two faculty surveys, which were then disseminated by the Academic Senate, and also developed a survey executed by the Center for Advanced Teaching and Learning. To extend our investigation, the Senate Information and Technology Policy Committee (ITPC) collaborated with the University Decision Support in the Provost's office to launch an additional student survey. This initiative was aimed at evaluating the use of generative AI at Northeastern University, successfully collecting responses from 679 students. Our methodology was further enriched by conducting key interviews with the Director of Global Education at Microsoft, the president of the Northeastern University AI Club, and a Husky alumnus who has ventured into founding a generative AI research company. The insights gained from these multifaceted data sources are instrumental in informing our findings.

**Findings:**

1. The widespread integration of generative AI into academic practices at Northeastern University is evident, with 80% of students incorporating this technology into their routine. A significant 70% of students report using generative AI to enhance their learning experience, highlighting its role as a facilitator of educational engagement. Furthermore, an overwhelming 78% of respondents are committed to using AI ethically, supplementing rather than replacing their original work. This conscientious application is further supported by 53% of students who view AI as a tool for enhancing critical learning skills, with only a minimal number resorting to its use for completing homework. These findings underscore that students at Northeastern currently have a thoughtful and responsible integration of AI in academic endeavors, enhancing learning outcomes while maintaining integrity.
2. Digital Divide between Faculty and Students: There is a clear digital divide between students and faculty in the use, and in the adoption of generative AI in teaching and learning. The key findings reveal that Northeastern faculty have been using generative AI sparingly in the current academic year. According to the Fall 2023 Academic Senate survey, 32% of the faculty reported using generative AI in teaching. The utilization of generative AI for research was even rarer. In the same survey, when faculty were asked, 'Have you employed generative AI tools in any part of your academic research?', a significant 76% responded in the negative, while only 24% confirmed their use of these tools.
3. Positive and Negative Views: In the Fall 2023 survey, a section of the faculty expresses optimism about the potential of AI to enhance teaching and research. Some educators see AI as an innovative tool that can aid in research and teaching. Others believe that AI can play a constructive role in education if used correctly. The availability of AI resources is seen as a positive development. "The university should reimburse the cost of using ChatGPT or other generative AI in teaching and research," one respondent states. Negative Views: However, concerns regarding AI's application in academia are predominant. The most voiced concern is the potential for AI to facilitate cheating. A faculty member notes, "Avoid cheating," highlighting the need for integrity. Over-Reliance on AI: Some faculty worry about students becoming overly dependent on AI. "Making sure students do not rely on AIs for their final drafts," comments a respondent. Ethical and Practical Concerns: Ethical issues and the practicality of AI integration are also major concerns. One educator states, "Clear and consistent rules about use of AI that violates academic integrity."
4. Significant number of faculty feel uncomfortable about using generative AI in teaching and learning. In the Spring Senate faculty survey, when asked, 'How comfortable are you using generative AI in your academic work?' out of 698 responses, only 13.5% felt comfortable, and 26% felt somewhat comfortable. Conversely, a notable 37.6% felt either somewhat uncomfortable or very uncomfortable. A somewhat concerning finding emerged from the response to Question 44, which asked, 'Have you included a policy regarding the use of generative AI technologies in your course syllabus?' It was revealed that just over 50% of Northeastern faculty do not have a policy in their syllabus addressing the use of generative AI.
5. In the Spring Academic Senate 2024 Survey, Northeastern faculty members were asked, "Do you promote students developing their prompt-engineering skills using generative AI?" Among the 690 faculty who responded, 34% stated they never promote prompt engineering skills. Meanwhile, 27% indicated they sometimes do, 25% said they rarely do, and only 14% reported they often or always promote it. Interestingly, while the majority of Northeastern faculty do not actively promote prompt engineering skills, there is a strong consensus on the importance of developing digital literacy for students. When asked “How important do you believe developing digital literacy, including the use of generative AI, is for students' future success?” 27.1% (187 responses) considered it extremely important, 31.5% (218 responses) viewed it as very important, and 28.70% (198 responses) deemed it moderately important. Only a minority, 8.9% (62 responses), felt it was slightly important, and a mere 3.6% (25 responses) believed it was not at all important.
6. Faculty Needs: A significant majority of faculty, 67.2% (464 respondents), express support for the university to offer AI training, demonstrating a strong recognition of its importance in the academic setting. 22.4% (155 respondents) remain while a minority, totaling 10.3% (71 respondents), shows some level of disagreement, indicating concerns over its relevance, implementation, or the role of AI in academia. From this 10%, there were 37 respondents who highlighted a notable opposition to the idea of university-provided AI training.
7. Faculty have apprehension about the AI in teaching and learning. The survey results from Fall 2023 indicate a prevailing apprehension from faculty about the role of AI in academia. Concerns about academic integrity, skill erosion, and ethical implications significantly outweigh the potential benefits. This cautious stance suggests an urgent need for comprehensive guidelines and strategies for responsible AI integration in academic settings. The demand for clear guidelines and strategies is evident, underscoring the importance of preserving academic integrity and fostering critical thinking skills in the era of AI.

**Recommendations:**

1. **ITPC recommends the University provide accessible and specialized resources**: University should develop a repository of accessible resources for on-demand learning about AI in teaching and learning. This repository should include specialized resources for different academic disciplines and roles, such as co-op coordinators, to address the specific needs and challenges faced by faculty in integrating AI into their curricula. A good example to follow is the one University of Michigan is using: <https://genai.umich.edu/>
2. **ITPC recommends the University develop and support implementation of policies for Ethical AI use**: University should formulate and disseminate policies that ensure the ethical use of AI in teaching and learning. This includes guidelines for maintaining academic integrity, addressing AI biases, and ensuring equitable access to AI resources. Run workshops focusing on ethics and policies.
3. **ITPC recommends the University encourage and establish hands-on AI Learning Labs and one on one learning experiences using AI**: University should encourage and build more dedicated spaces or virtual labs where educators can engage in hands-on practice with AI technologies. These labs should facilitate experiential learning opportunities, allowing faculty to explore AI tools' practical applications in real-world teaching scenarios. Supporting this with step-by-step guides, video tutorials, and live support can enhance the learning experience. Additionally, provide support for faculty to innovate in AI-related pedagogy, including grants or awards for innovative projects and research in AI education. Create opportunities for faculty to work one on one with computer engineers to develop their knowledge of generative AI. Promote faculty to apply for small innovation grants.
4. **ITPC recommends University support and build more Learning Communities**: Encourage the continuation of ongoing grassroots groups such as practice communities, reading clubs, and peer mentoring circles focused on AI. Help promote the building of new ones. These clubs and groups today serve as platforms for continuous professional development, knowledge exchange, and support among faculty at various stages of AI integration in their teaching practices. Create a space in which these communities are also able to communicate with one another, and where common guest speakers can be invited and promoted. It is important to have avenues where external voices have a forum to speak to our faculty.
5. **ITPC recommends the University organize Community Discussions and Faculty Panels**: Regularly schedule community discussions and faculty panels to foster a culture of open dialogue about AI in education. Bring in outside experts to share their insights. These events can highlight innovative uses of AI, discuss ethical considerations, and explore challenges faced by educators. Featuring faculty members who have successfully integrated AI into their teaching can provide valuable insights and inspire others.
6. **ITPC recommends the University set up a team of experts to access best platforms faculty and students can use for their future teaching and learning.** Explore institutional subscription of advanced generative AI technologies.

Respectfully submitted,

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