TO: Senate Agenda Committee

FROM: The NUpath AdHoc Committee

DATE: March 3, 2025

SUBJECT: Final report for the NUpath AdHoc Committee Charges

The NUpath AdHoc Committee had 10 formal meetings during the academic year along with 3 additional fact-finding meetings with different stakeholder groups. The committee carried out the specific charges assigned by SAC. The charges were addressed as follows with recommendations and/or resolutions. The following is an executive summary to provide a brief overview of the charges, actions taken, and recommendations. The included appendices detail the fact-finding and reasoning behind our activity and recommendations.

Introduction

NUpath represents Northeastern University's core curriculum framework; designed to provide a well-rounded educational experience across a variety of learning domains as well as serves to meet specific accreditation requirements. Since its implementation in 2016, NUpath has aimed to integrate key learning goals into diverse course offerings, enabling students to meet their academic and professional aspirations. However, formal reviews and updates have been limited, necessitating this committee's work to assess the current state of NUpath, its processes, and opportunities for improvement.

The charges were addressed as follows with recommendations and/or resolutions:

Charge 1: Understanding the Current State of NUpath

Review current NUpath attributes and respective lists of approved courses to understand the current state of NUpath.

The review of current NUpath attributes was conducted to assess the availability, effectiveness, and alignment of the general education curriculum with student needs and institutional goals. This charge was approached through a combination of quantitative analysis—examining enrollment patterns and course availability—and qualitative insights gathered from faculty, advisors, and institutional assessment efforts. As this charge was more broadly undertaken as the fact-finding portion of our charges, the details and reasoning behind recommendations based on the sources are included within their respective appendices, but summarized here.

To establish a comprehensive understanding of NUpath, the committee conducted the following activities:

- Data Analysis: Reviewed historical NUpath course approvals, enrollment trends, and attribute distribution across colleges using institutional data sources (See Appendix A)
- Stakeholder Feedback: Gathered perspectives through the Fall 2024 Faculty Survey and direct meetings with advising leadership, the Office of Institutional Assessment and Evaluation, and the Associate Deans of Undergraduate Programs to understand challenges students face in fulfilling NUpath requirements (See Appendix B and C) A student initiative also reached out and provided some indirect feedback (See Appendix B and K)

• Peer Institution Comparison: Evaluated how general education models at peer institutions approach similar requirements, identifying strengths and gaps in NUpath's current structure. (See Appendix F and G)

Limitations which impacted the scope of the findings. Future work should find ways to address or mitigate these limitations:

- Lack of Direct Student Input: This review relied primarily on faculty, advisor, and institutional assessment perspectives. While valuable, it does not fully capture student experiences with NUpath. A future student survey and/or focus groups should be conducted to validate advisor-reported challenges regarding student course selection and navigation.
- Lack of Enrollment Capacity Data: The analysis focused on available courses and enrollments but did not account for waitlists or section caps, which may obscure true accessibility concerns.
- Limited Faculty Survey Participation: The faculty survey response rate, while informative, may not fully represent broader faculty sentiment or engagement with NUpath.
- Exclusion of Co-op Considerations: The analysis primarily focused on traditional semester enrollments and did not fully account for how co-op cycles affect students' ability to complete NUpath requirements.
- One-Year Snapshot: The enrollment analysis covered the 2023-2024 academic year, limiting the ability to assess long-term trends in NUpath participation. This was not an immediately adjustable concern though as a simple expansion to cover all courses available from Fall 2020-Spring 2024 would also be insufficient. The co-op cycle

Key Takeaways & Recommendations for Future Committees

- 1. Engage Student Feedback
 - a. As part of periodic review or as the next phase,
- 2. Enhance Course Tracking and Enrollment Data
 - a. Future reviews should incorporate capacity and waitlist data to better assess whether NUpath courses are accessible to all students.
- 3. Improve Faculty Engagement in NUpath Assessment
 - a. Strategies should be developed to increase faculty participation in surveys and structured feedback loops regarding NUpath alignment.
- 4. Conduct a Multi-Year Trend Analysis
 - a. Expanding beyond a single-year dataset will provide a more accurate picture of NUpath availability and student completion trends over time.
- 5. Refine Attribute Distribution for Equitable Access
 - a. The data suggests certain attributes are disproportionately represented, while others may lack sufficient offerings. Future reviews should establish clear thresholds for attribute availability to prevent bottlenecks in student course selection.
- 6. Strengthen Advising Tools for NUpath Navigation
 - a. The advising team reported that students often struggle to identify appropriate NUpath courses. Enhancing NU Dashboard and Banner usability could significantly improve student decision-making and course planning.

Charge 2: Recommendations for Updates to and a Periodic Review Process for NUpath

Develop a process for periodic review, revision, and sunsetting of NUpath attributes and make an initial set of recommendations for a revised set of NUpath attributes for the 2025-2026 catalog year.

The review and refinement of NUpath attributes have historically been sporadic and largely reactive, responding to external accreditation requirements or individual college assessments rather than a structured institutional review process. This charge sought to establish a systematic, periodic review process for revising, refining, and potentially sunsetting NUpath attributes based on data-driven insights and stakeholder feedback. For a detailed breakdown of the process and reasoning regarding this charge, see Appendix D.

To develop a framework for ongoing review, the committee undertook the following activities:

- Assessment of Past Review Efforts: Evaluated previous NUpath revisions, accreditation-driven changes, and past faculty-led updates.
- Faculty and Institutional Input: Conducted faculty surveys and internal discussions to assess existing attributes and explore the viability of new competencies. (See Appendix C)
- Comparative Peer Analysis: Reviewed general education periodic review structures at peer institutions to identify best practices. (See Appendix F and G)
- Exploration of Learning Objectives and Competency Overlaps: Examined how attributes are currently defined and whether redundancies exist between certain competencies.
- Student-Led Initiative (SustaiNUbility): Considered student-supported efforts to introduce a sustainability-focused NUpath attribute, reflecting evolving institutional priorities and student interest. (See Appendix B and K)

Limitations of the Review and Analysis. Future work should find ways to address or mitigate these limitations:

- Lack of Historical Review Structures: Since NUpath attributes have not undergone a formal institution-wide review since 2016, there is limited precedent for defining a standard revision process.
- Faculty Survey Participation Constraints: While faculty input was valuable, the survey response rate varied across colleges, and engagement in discussions on refining attributes was uneven.
- Overlap in Attribute Definitions: The committee faced challenges in distinguishing between certain competencies (e.g., Interpreting Culture vs. Engaging Differences and Diversity), making it difficult to determine whether updates should involve merging, restructuring, or refining attributes.
- No Direct Student Feedback: While student interest in sustainability was highlighted through the Sustainability petition and referendum, broader student feedback on attribute relevance was not formally collected, representing a potential gap in the review.

Key Takeaways & Recommendations for Future Committees

- 1. Implement a Formalized Five-Year Review Cycle
 - a. Establish a structured periodic review process to ensure ongoing alignment between NUpath attributes, institutional goals, and accreditation standards.
- 2. Refine and Differentiate Learning Objectives
 - a. Many attributes contain overlapping content, making it difficult to ensure distinct, meaningful learning experiences. A more rigorous assessment framework is needed to clarify how each attribute contributes uniquely to student learning.
- 3. Increase Faculty Participation in Review Processes
 - a. Faculty engagement was inconsistent, suggesting that future NUpath revisions require dedicated outreach, structured discussions, and incentives for participation.
- 4. Expand Student Input on NUpath Attributes
 - a. A structured student survey or focus groups should be incorporated into future reviews to validate whether existing attributes are meeting student needs and career relevance.
- 5. Ensure Learning Objectives are Measurable and Assessed
 - a. The committee emphasized that NUpath attributes must be anchored in clear assessment criteria (e.g., using HelioCampus or CourseLeaf) to track student progress and ensure the curriculum is meeting its intended goals.
- 6. Consider New Attributes Based on Institutional Priorities
 - a. Sustainability, financial literacy, and information/media literacy were frequently discussed as emerging areas of focus. These should be evaluated against institutional priorities and feasibility in the next review cycle.

Establishing a formalized periodic review process is critical to ensuring that NUpath remains adaptable, relevant, and aligned with both institutional priorities and evolving student needs. This charge lays the groundwork for future structured revisions, informing Charge 3's recommendations on approval processes and the broader goal of strengthening NUpath's role in Northeastern's curriculum.

Charge 3: Recommendations for a Revised NUpath Approval Process

In consultation with the Vice Provost for Curriculum and Programs, review the processes and practices for approving courses that fulfill NUpath attributes and recommend revisions as necessary.

The approval process for courses seeking NUpath designation has faced challenges related to transparency, efficiency, and alignment with learning objectives. This charge focused on assessing the current approval structure, identifying pain points, and recommending refinements to improve clarity and faculty engagement. A key goal was to ensure that course approvals meaningfully align with NUpath's stated learning outcomes while streamlining faculty interactions with the system. For a detailed breakdown of the process and reasoning regarding this charge, see Appendix E.

Scope of Work Completed

To evaluate the effectiveness of current course approval procedures, the committee conducted the following activities:

- Analysis of Existing Approval Processes: Reviewed the current four-step submission and approval system in CourseLeaf and its integration with faculty workflows. (See Appendix E)
- Faculty Feedback Review: Examined challenges faculty encounter when proposing courses, including lack of clarity in guidelines and inconsistencies in approval criteria. (See Appendix B and C)
- Institutional Collaboration: Worked with the Vice Provost for Curriculum and Programs and the Office of Institutional Assessment and Evaluation to explore potential refinements.
- Best Practices Exploration: Considered how peer institutions structure their general education course approvals to identify improvements. (See Appendix F and G)
- Technical Assessment: Assessed how NUpath assessments could be tracked within Canvas and HelioCampus to support ongoing evaluation.

Limitations of the Analysis. Future work should find ways to address or mitigate these limitations:

- Lack of Standardized Review Metrics: While approval trends were reviewed, no centralized repository exists tracking course approval rates over time, making longitudinal assessment difficult.
- Limited Faculty Input on Final Approvals: Faculty concerns were documented, but direct feedback from approval committee members was more limited.
- Variability in Course Approval Experiences: Faculty experiences in securing NUpath designations vary by college and department, complicating a uniform solution.

Key Takeaways & Recommendations for Future Committees

- 1. Clarify Course Approval Guidelines
 - a. The faculty guide for preparing NUpath proposals should be updated to better align with CourseLeaf entry requirements and syllabi expectations.
- 2. Ensure Learning Outcomes Are Clearly Defined
 - a. The approval process should emphasize using Bloom's Taxonomy of Verbs and structured assessment mapping to ensure courses meet stated NUpath objectives.
- 3. Increase Transparency in Approval Stages
 - a. Faculty often lack visibility into where their proposal stands in the process. A statustracking mechanism should be introduced.
- 4. Standardize Course Approval Criteria
 - a. Establishing clear rubrics for approval decisions will help mitigate inconsistencies between different reviewers and departments.
- 5. Integrate NUpath Assessments into Canvas and HelioCampus
 - a. Exploring options for direct mapping of learning assessments will improve data collection for long-term program evaluation.
- 6. Enhance Faculty Support for NUpath Integration

a. Collaboration with CATLR to develop faculty workshops on best practices for structuring NUpath-aligned courses should be prioritized.

By refining the approval process, NUpath can streamline faculty participation, improve alignment with learning goals, and ensure course design is consistently evaluated. These insights will help strengthen the program's ability to provide a rigorous and accessible general education framework moving forward.

Respectfully submitted,

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Appendix A: Review of Availability Through Data Analysis of Northeastern University Course Analytics

The NUpath Ad Hoc Committee analyzed the availability of courses with NUpath attributes using the Registrar's Tableau platform to determine the extent of offerings broken down by course, section, and enrollment. As NUpath concerns undergraduate students, the analysis was limited to Fall 2023 and Spring 2024 as a representative sample of offerings during 1 academic year, excluding Summer sessions. We acknowledge that many students do take summer sessions, it is not something all students participate in or even regularly for those that do, with summer session undergraduate enrollments being about 10% of the typical academic year. The following discussion notes when consideration of summer sessions alter the distribution, but for the purposes of this analysis, the focus remained on what the typical undergraduate utilized during the 2023/2024 academic year.

Table 1 provides a summary courses, sections, and enrollments for all offerings, undergraduate offerings, and NUpath-specific offerings during these terms. The data used in this analysis was primarily sourced from the Active Course State Freeze available from the Registrar's tableau site¹.

OFFERING TYPE	COURSES (#)	SECTIONS (#)	ENROLLMENTS (#)
ALL OFFERINGS	4,062	14,376	281,392
UG OFFERINGS	2,664	9,596	222,091
NUPATH OFFERINGS	1,030	3,571	91,325
NUPATH UG %	38.7%	37.2%	41.1%

Table 1: Course, Sections, and Enrollment Totals for Fall 23/Spring 24

To provide a broader historic context, the university has approved a total of 3,169 courses that provide NUpath credit. Of those, 32.5% were offered during the fall and spring terms of the 23/24 academic year².

NUpath Attribute Distribution Insights

Table 2 showcases the number of courses, sections, and enrollments for the individual NUpath attributes. They are organized by total number of unique courses, sections, or enrollments for that NUpath (#) and then as a percent of that number (%) to provide comparisons just within the available NUpath offerings. For more detailed tables that compare the college-by-college vs individual NUpath attributes are available in Appendix H. The attributes with the highest representation include Analyzing/Using Data (NCAD), Natural/Designed World (NCND), and Societies/Institutions (NCSI), which collectively contribute over 40% of total enrollments. Conversely, attributes such as Advanced Writing in the Disciplines (NCW3) show limited offerings (and enrollments) (below 5% on both counts) during the typical academic terms.

¹ Active Course Stat Freeze - https://tableau.northeastern.edu/#/site/Registrar/views/ActiveCourseStatFreeze/ActiveCourseStatFreeze

² NUpath Courses - https://tableau.northeastern.edu/#/site/Registrar/views/NUpathAttributes/NUpathAttribute

Table 2: NUpath Attributes Available and Enrolled during Fall 2023 and Spring 2024 terms organized by Courses (Crs), Sections (Sec), and Enrollments (Enr)

Attribute	Code	Crs (#)	Crs (%)	Sec (#)	Sec (%)	Enr (#)	Enr (%)
		1030	100.0%	3571	100.0%	91325	100.0%
Natural/Designed World	NCND	114	11.1%	340	9.5%	16160	17.7%
Creative Express/Innov	NCEI	129	12.5%	469	13.1%	9023	9.9%
Interpreting Culture	NCIC	160	15.5%	310	8.7%	8053	8.8%
Formal/Quant Reasoning	NCFQ	57	5.5%	281	7.9%	12227	13.4%
Societies/Institutions	NCSI	197	19.1%	469	13.1%	14912	16.3%
Analyzing/Using Data	NCAD	125	12.1%	784	22.0%	21847	23.9%
Difference/Diversity	NCDD	164	15.9%	303	8.5%	6641	7.3%
Ethical Reasoning	NCER	88	8.5%	235	6.6%	6947	7.6%
1st Yr Writing	NCW1	5	0.5%	144	4.0%	2561	2.8%
Adv Writ Dscpl	NCW3	15	1.5%	212	5.9%	3765	4.1%
Writing Intensive	NCWI	140	13.6%	442	12.4%	10456	11.4%
Integration Experience	NCEX	100	9.7%	493	13.8%	6869	7.5%
Capstone Experience	NCCE	109	10.6%	420	11.8%	8164	8.9%

To establish a meaningful minimum requirement though, a baseline based on student graduation requirements was set. Each student must complete all 11 attributes by the end of their time at Northeastern. Given that there are 10 standard attributes that require each to be taking once and the writing attribute requires 4 courses of any of the sub-attributes, students need to take a maximum of 14 courses. Completed in 4 years, that would average to 3.5 NUpath courses per year out of a typical 8 taken. This requires at least 44% of all enrollments to be NUpath-designated to ensure full availability. We know that 13% of enrollments were in Multi-NUpath courses, we assume that reduces the requirement to be under the 41% currently available during the fall and spring semester. This is just a working measure set by following a logical proof and limited assumptions established and utilized for this discussion.

As for individual attributes, these offerings should be available at a rate of 7.15% of NUpath enrollments (1/14) and 28.57% collectively for Writing Across Audiences/Genres (4/14) to meet demand. Currently most attributes are above that threshold, although some not by much. NCDD, NCER, and NCEX exceed that minimum by less than 10%. In contrast, NCND and NCSI more than double that minimum and NCAD triples it. NCW1, NCW3, and NCWI do not meet the combined requirement of 28.57% coverage though.

Even though our analysis primarily excluded summer courses as they are not a consistent option for many students, the number of available attributes does differ and change the overall distribution. Something of note should be that while our summer sessions, see enrollment numbers for NUpath courses to be approximately 1/5th that of the typical academic terms, NCW3 summer enrollments

numbers are 46% of their fall and spring enrollments. In addition, 16% of multi-NUpath enrollments involve NCWI. Although NCW1 also represents a small percentage of overall enrollments and has just been noted for being under our theoretical minimum, its enrollment of 2,561 aligns closely with the approximate number of students needing to fulfill this attribute (i.e. the number of first year students during that year [Needs Citation]), indicating adequate coverage. While this indicates adequate capacity for NCW1, challenges may remain for students fulfilling other attributes due to their limited offerings. Members of our own committee noted their own experiences with Bouvé College students taking NCW3 courses during the summer due to insufficient availability during the Fall and Spring terms.

This leads us to some limitations of this analysis though is that it is based on a snapshot of one academic year. A better examination may have been to collect the data from a typical student tenure, possibly with considerations for typical co-op sequences, rather than assume a single standard academic year as generally representative. It also doesn't take into account course capacities, which may have created unexpected barriers to having more enrollments for certain categories. The level of integration into each major standard course progression is another consideration that wasn't undertaken. Dependent on the updates to the NUpath system and their implementation, further consideration of these factors are recommended as well as establishing policies for ensuring a minimum level of availability for all attributes.

NUpath's accessibility is supported by its integration into existing curriculum structures, but disparities exist in how attributes are distributed and utilized:

Alignment with Demand:

Most attributes are provided at a scale that clearly meets the student demand. Particularly since our data is based on active enrollments, attributes like NCAD are being well utilized with approximately 10% of all undergraduates enrollments being of that attribute. This indicates an effective distribution for most NUpath attributes to ensure these are achievable within the typical academic terms.

Underutilized Attributes:

Attributes such as **NCW3** (**Advanced Writing in the Disciplines**) show mismatches, with 4.1% of sections but only 2.8% of enrollments. This suggests potential barriers, such as scheduling conflicts or uneven accessibility. We lack any data on section caps, wait lists, or failed enrollment attempts but do know this category is below the theoretical minimum necessary to accommodate and have reporting on enrollment difficulties, so we may assume that class size or overall offerings may be an issue that needs further addressing.

Enhance Data Integration:

Utilize real-time analytics to monitor accessibility trends and make data-driven adjustments based on readily available data sources. This analysis used a logically established minimum based on average course loads, typical academic terms, and student tenures and, with that, found some attributes to be below that measure. Our contact with the Provost office though has only reported 20 override requests in the last year, indicating that the vast majority are achieving these requirements and if these logical minimums were broadly applicable, it would be far more. In contrast though, some students have reported difficulty in meeting certain NUpath requirements therefore having to adjust schedules to meet them. Further effort and analysis is required to determine a meaningful "Utilization" metric for providing a signal as to whether course offerings are sufficient or being properly utilized

College-Level Contributions

The distribution of NUpath attributes across colleges reflects both broad contributions from colleges with diverse course offerings and targeted contributions from colleges focusing on specific attributes. Table 3 provides the number of courses, sections, and enrollments for NUpath offerings within each college. They are organized by total number of unique courses, sections, or enrollments for that college (#) and then as a percent of the total number of offerings (%) to provide comparisons amongst colleges offerings. Appendix A provide a detailed breakdown of these contributions broken down by NUpath attribute and college.

Table 3: NUpath Availability and enrollment by College for the Fall 2023 and Spring 2024 terms organized by Courses (Crs), Sections (Sec), and Enrollments (Enr)

College	Crs (#)	Crs (%)	Sec (#)	Sec (%)	Enr (#)	Enr (%)
All	1030	100.0%	3571	100.0%	91325	100.0%
Bouvé' College of Hlth Sciences	60	5.8%	301	8.4%	5653	6.2%
Coll of Arts, Media & Design	254	24.7%	640	17.9%	12331	13.5%
Coll of Professional Studies	2	0.2%	5	0.1%	83	0.1%
Coll of Soc Sci & Humanities	369	35.8%	694	19.4%	16918	18.5%
College of Engineering	38	3.7%	185	5.2%	3612	4.0%
College of Science	216	21.0%	1027	28.8%	24846	27.2%
D'Amore-McKim School Business	25	2.4%	239	6.7%	7213	7.9%
Khoury Coll of Comp Sciences	51	5.0%	264	7.4%	15914	17.4%
Office of the Provost	14	1.4%	214	6.0%	4743	5.2%
Mills College at Northeastern	1	0.1%	2	0.1%	12	0.0%

As NUpath is primarily a concern for undergraduate students, our discussion excludes colleges that do not provide a significant number of contributions due to the nature of their course work (CPS) or their developmental stage within the institution (Mills). COS and CSSH were the top contributors at 27.2% and 18.5% of enrollments respectively. COE was the least at 4.0% of enrollments. Significant discrepancies are noted in the representation of NUpath courses across colleges.

In most cases, colleges naturally contribute more courses to NUpath attributes that align with their academic focus. For example:

- The College of Science (COS) contributes heavily to Natural/Designed World (NCND) (17.7% of all enrollments) and Analyzing/Using Data (NCAD) (23.9%), reflecting its emphasis on scientific inquiry and data analysis.
- The College of Social Sciences and Humanities (CSSH) dominates Societies/Institutions (NCSI), accounting for 66.9% of all enrollments—a logical alignment given its focus on social sciences.

• D'Amore-McKim School of Business contributes 22.8% of all enrollments in Ethical Reasoning (NCER), likely due to its core emphasis on business ethics.

However, while many colleges align naturally with certain attributes, some demonstrate a broader, more systematic approach to ensuring their courses carry NUpath designations. CSSH and COS together account for 27.2% and 18.5% of all NUpath enrollments, respectively, suggesting not just disciplinary alignment but also a concerted effort to strategically tag courses. In contrast, D'Amore-McKim, despite its strong contribution to NCER, only represents 2.4% of overall NUpath enrollments, indicating a more focused rather than widespread approach.

Notable Disparity: College of Engineering's (COE) Limited Contribution

A notable disparity to the natural contribution to certain NUpath attributes would be the College of Engineering (COE). The COE's overall NUpath contribution is significantly lower than expected, with just 4.0% of total NUpath enrollments. Given its curriculum's emphasis on quantitative analysis, problem-solving, and applied sciences, COE would logically be expected to contribute more heavily to:

- Analyzing/Using Data (NCAD) Currently only 4.1% of total enrollments
- Formal/Quantitative Reasoning (NCFQ) 0.3% of total enrollments
- Natural/Designed World (NCND) 0.01% of total enrollments

These percentages suggest that engineering courses may be under-tagged with NUpath attributes, limiting students' ability to fulfill core curriculum requirements within their major coursework. Unlike COS and CSSH, where both disciplinary alignment and strategic tagging appear to be at play, COE's participation suggests either structural barriers to course tagging or a lack of active engagement in ensuring NUpath integration.

Understanding NUpath Participation Strategies

The distribution of NUpath attributes across colleges highlights both natural curricular alignment and targeted strategic efforts:

- Inherent Curricular Alignment: Colleges contribute more courses to attributes that align with their disciplines. For example, CSSH naturally leads in NCSI, but this still requires the college to actively tag courses with the appropriate NUpath designation.
- Strategic Course Tagging and NUpath Participation: Some colleges appear to actively optimize their courses for NUpath participation. CSSH's disproportionate contribution to NCSI—compared to other colleges' shares of their respective strengths—suggests a deliberate effort to maximize participation, a trend also reflected in COS.
- Combined Approach: A combination of disciplinary alignment and systematic course tagging results in greater NUpath enrollments for certain colleges, reinforcing their presence in the core curriculum.

Key Takeaways

- Some colleges actively optimize NUpath participation, ensuring representation across multiple attributes beyond just their natural curricular alignments (e.g., CSSH and possible COS).
- Others primarily contribute based on disciplinary strengths, with less indication of strategic tagging efforts (e.g., D'Amore-McKim).

- The College of Engineering's lower-than-expected contributions raise questions about whether its courses are appropriately tagged with NUpath attributes or if structural barriers limit participation.
- These insights highlight the different ways colleges approach NUpath, emphasizing where adjustments may be needed to balance access, better reflect disciplinary strengths, and improve the student experience.

Appendix B: Stakeholder Feedback - Interview/Focus Groups

Input from Advising Leadership

On November 20, 2024, the committee met with the advising leadership team, organized by Krystal Ristaino, Director of Undergraduate Academic Advising, to discuss the challenges students face in meeting their NUpath requirements. Advisors from each college shared their experiences, providing valuable insights into the logistical, systemic, and student-driven factors that influence NUpath navigation. While these perspectives are drawn directly from advising experiences rather than broader institutional data, they highlight common trends and potential areas for improvement.

A primary challenge identified was the difficulty students face in identifying which courses satisfy NUpath requirements. As course offerings evolve, students often struggle to determine eligibility, particularly since NUpath attributes cannot be applied retroactively to completed courses. Additionally, outdated system tools, such as NU Dashboard and Banner, create usability barriers that make tracking progress and finding courses cumbersome. Course availability issues were also noted, particularly for Advanced Writing (AWD) courses, which often fill quickly and create enrollment bottlenecks.

Student decision-making patterns also present challenges. Many students attempt to maximize efficiency by selecting courses that fulfill multiple requirements, often prioritizing convenience over the broader educational intent of NUpath. Others experience choice paralysis, feeling overwhelmed by the number of available options without clear guidance on how selections align with long-term goals. Additionally, some students attempt to complete all NUpath requirements early, potentially limiting the developmental benefits of a more distributed approach. STEM and business students, in particular, tend to resist taking courses outside their disciplines, often perceiving them as less relevant to their academic and career paths.

Advisors emphasized that, while students express concerns about course availability, this is largely a perceived issue driven by demand for specific courses rather than a shortage of NUpath-eligible offerings. They also noted that students often lack a clear understanding of the purpose and intent of NUpath, focusing primarily on requirement fulfillment rather than academic exploration. Advisors appreciate the flexibility of NUpath and frequently guide undecided students toward broader course selections to maintain curricular flexibility. However, they stressed the importance of improving communication about NUpath's role in fostering a well-rounded education.

Key Takeaways & Recommendations

- Enhance Search Functionality: Improving course search tools with better CRN integration and clearer filtering options would make NUpath courses more accessible.
- Clarify and Streamline Requirements: Exploring adjustments to NUpath categories could improve clarity and ease of navigation without sacrificing flexibility.
- Improve Communication on NUpath's Purpose: Providing clearer guidance on the value of NUpath courses beyond requirement fulfillment may help students engage more meaningfully with the curriculum.
- Validate these insights: Further exploration of some of these insights through student surveys and focus groups to confirm these insights particularly around concerns of lack of understanding, "shopping" & "double dipping", course/college preferences, and choice paralysis.

These insights highlight key areas where targeted improvements could enhance the student experience, ensuring that NUpath remains both flexible and accessible while achieving its broader educational goals.

Input from Office of Institutional Assessment and Evaluation

On December 18th, 2024, the committee chair met with Maureen O'Shea of the Office of Insitutional Assessment and Evaluation. She walked us through her ongoing work on NUpath Assessment analysis [citation needed for https://northeastern.sharepoint.com/sites/IAE/SitePages/NUpath-Assessment.aspx]. The 2020–2024 NUpath assessment findings reveal inconsistencies in assignment alignment, faculty engagement, and the overall effectiveness of NUpath attributes in meeting their stated learning goals. Assessment results indicate that while courses are tagged with NUpath attributes, not all have assignments that meaningfully align with the intended learning outcomes, raising concerns about the integrity of certain attributes. Some attributes, such as Ethical Reasoning (NCER) and Creative Expression and Innovation (NCEI), demonstrated significant variation in alignment across courses, suggesting a need for clearer expectations and review mechanisms. Additionally, faculty participation in assessment efforts remains low, with response rates ranging from 20% to 47% depending on the attribute, limiting the university's ability to fully evaluate the curriculum's effectiveness.

The findings also highlight that NUpath attributes have not been formally reviewed or revised since 2015, despite changes in course offerings and evolving pedagogical needs. Some attributes function more as curricular designations rather than measurable learning outcomes (e.g., Capstone Experience, Writing Intensive, and Experiential Learning), making assessment more difficult. Furthermore, courses can be approved for up to three attributes, but there has been no review to determine whether this enhances interdisciplinary learning or simply allows students to minimize coursework. Without a structured system for ongoing evaluation and improvement, gaps in alignment may persist unnoticed.

These findings reinforce the need for a formal review of NUpath attributes to determine whether they are effectively fulfilling their learning goals or require revision. Additionally, a structured reassessment process should be established to ensure that all courses continue to meet NUpath expectations beyond initial approval. Addressing these issues will help create a more coherent, transparent, and academically rigorous general education framework that aligns with institutional learning objectives.

Key takeaways:

- This discussion reinforced the need for a structured review of NUpath attributes to determine whether they are effectively meeting learning objectives or if some need revision, consolidation, or redefinition.
- The assignment alignment data provides a useful baseline for evaluating the effectiveness of different attributes, but low faculty engagement suggests that our understanding of the current state is still incomplete.
- There is no mechanism to ensure ongoing evaluation of NUpath attributes, meaning gaps in alignment may persist without intervention.

SustaiNUbility Student Initiative

The following input was provided by SustaiNUbility, a student-led initiative advocating for the creation of a sustainability-related NUPath requirement. While the committee was unable to meet with the group before the report deadline, a future meeting is planned to discuss their proposal in greater detail. Their

submission outlines the importance of climate education, student support for the initiative, and structural recommendations for incorporating sustainability into NUPath.

SustainUbility argues that climate change is an urgent issue that requires students to be equipped with the knowledge and tools to address environmental challenges. They believe that integrating sustainability into NUPath will prepare students to incorporate sustainable practices into their careers and strengthen Northeastern's reputation as a leader in sustainability and innovation. The group conducted a year-long student petition from April 2023 to April 2024, gathering 1,482 signatures in support of the initiative. Additionally, the proposal was featured as a referendum in the Student Government Association elections, where 66% of over 7,500 students voted in favor of creating a sustainability-related NUPath.

The initiative proposes multiple structural options for implementation. One approach would be to replace an existing NUPath with a sustainability-focused requirement. To minimize disruption, they suggest merging "Interpreting Culture" and "Differences and Diversity", as the two attributes share many overlapping courses. Alternatively, they argue that the existing "Engaging with the Natural and Designed World" (ND) NUPath does not sufficiently cover sustainability, as it includes non-environmental courses, allowing students to complete the requirement without directly engaging with sustainability topics. Instead, they advocate for a dedicated NUPath attribute, offering both basic environmental science courses and interdisciplinary sustainability courses that integrate sustainability with fields such as economics, business, and engineering.

To support their proposal, SustaiNUbility highlights peer institution models. The University of Vermont added a sustainability requirement to its core curriculum in 2024, ensuring all students complete at least one sustainability-designated course. The University of California, San Diego introduced a climate change general education requirement in September 2024, allowing students to fulfill the requirement within their own major to avoid disrupting time to degree. The initiative argues that Northeastern has the opportunity to become a national leader in sustainability education by implementing a similar model tailored to NUPath.

Key Takeaways & Recommendations

- **Strong Student Support:** 1,482 petition signatures and 66% approval in a student referendum indicate broad support for a sustainability-related NUPath.
- **Multiple Implementation Options:** Consider replacing, merging, or adding a NUPath attribute to include sustainability without increasing overall requirements.
- **Interdisciplinary Course Offerings:** Sustainability courses should be available across disciplines, allowing students to integrate sustainability into their fields of study.
- **Peer Institution Models:** The University of Vermont and UC San Diego offer precedents for sustainability requirements that Northeastern can build upon.
- **Institutional Reputation:** A sustainability-related NUPath would enhance Northeastern's leadership in sustainability and environmental education.

This input highlights a well-supported student-driven effort to expand sustainability education at Northeastern. Future discussions with SustaiNUbility will explore the feasibility and impact of their proposal within the broader NUPath framework.

Input from Undergrad Associate Dean's Meeting

On March 4, 2025, the committee met with the Undergraduate Associate Deans to discuss ongoing concerns and potential improvements for the NUpath curriculum. The deans had been previously informed of the intent to use this meeting as a focus group, and while some general inquiries about experiences with NUpath, its positives, and its pain points were provided as prompts, the discussion was primarily open-ended, allowing the deans to lead the conversation with their own concerns and insights. The discussion covered structural challenges in course approvals, assessment processes, enrollment patterns, and the broader philosophy of NUpath within Northeastern's curriculum.

Structural and Process Issues

The deans raised concerns about inconsistencies in the Degree Audit Reporting System (DARS). Specific cases were noted where students believed they had fulfilled a NUpath attribute based on their accessible tools, only to later find that the attribute had not been officially applied. This discrepancy appears to stem from a disconnect between systems, where DARS may be applying a NUpath designation to all sections of a course, even though only some sections carry the attribute. This issue has led to confusion among students and underscores the need for greater system alignment and transparency.

Additionally, the process for adding and removing attributes from courses lacks standardization. While attributes are frequently assigned, there is no formalized review mechanism ensuring consistent implementation, particularly when it involves only sections and not all offerings of a course. A multi-year periodic review cycle—with suggested timeframes ranging from four to eight years—was proposed to maintain alignment between NUpath and institutional priorities. There was also discussion about whether the number of required attributes should be standardized over time to ensure consistent academic expectations.

NUpath Attribute Distribution and Cross-College Enrollment

A major concern was the structural impact of NUpath's attribute distribution across colleges. NUpath attributes were originally designed as a 'sneaky distributive' system, meaning they were intended to encourage students to take courses outside their home college by embedding different attributes within various disciplines. However, without a formal distributive requirement, colleges have been able to apply NUpath attributes internally, keeping students within their own college. This has led to concerns that the current system is in conflict with the original goal of broad educational experiences.

Furthermore, the financial structure and the NUpath application process further complicate this issue, as colleges may have incentives to retain students within their own course offerings rather than encouraging interdisciplinary exploration. Advising data indicates that many students attempt to fulfill all NUpath requirements within their home college. While some advisors actively encourage students to explore interdisciplinary options, there is no mechanism to enforce this. Some colleges do not offer courses with certain NUpath attributes, yet their students are still able to meet all NUpath requirements without enrolling in courses outside their home college. The deans discussed whether a formal policy should be introduced to require cross-college enrollment for at least some NUpath courses. There was mixed feedback on this proposal. Some deans supported the idea, as it would enforce the original intent of NUPath, eliminate the 'sneaky distribution' loophole, and potentially lead to better cross-college collaboration while counteracting financial disincentives for interdisciplinary enrollment. Others, however, expressed major concerns, citing increasing pressure to allow for greater flexibility,

particularly for double majors who sometimes have as few as two electives available. The discussion highlighted a tension between ensuring a broad educational experience and accommodating students' varied degree constraints.

Learning Objectives and Course Approval

The discussion also addressed the need to better align NUpath attributes with course-level learning objectives. The deans emphasized the importance of clarifying and standardizing learning objectives while incorporating assessment into Heliocampus, potentially integrating with Canvas to streamline data collection. They agreed that assessment should be required as part of the NUpath course approval and renewal process to ensure attributes remain meaningful. Additionally, they raised the question of whether courses should be eligible for NUpath designation only after they have been taught at least once, ensuring that course execution aligns with stated learning objectives before an attribute is assigned.

Enrollment Patterns and Course Accessibility

Concerns about NUpath's role in enrollment patterns were also raised. Some colleges actively ensure that most of their courses carry NUpath attributes to increase course desirability, while courses without attributes tend to experience lower enrollments. At the same time, over-enrollment in key NUpath categories, such as Advanced Writing in the Disciplines (AWD) and Writing Intensive (WI), has created bottlenecks for students attempting to fulfill these requirements. The deans also acknowledged that some NUpath attributes have drifted from their original intent.

While NUpath was initially designed as a distributional requirement, ensuring that students engaged in coursework beyond their major, it has been "watered down" over time, with colleges structuring their offerings to allow students to remain within their disciplines. There was broad agreement that revisions should focus on reducing ambiguity in attributes and potentially incorporating a distributional requirement for interdisciplinary attributes to ensure students engage more broadly across disciplines.

Key Takeaways & Recommendations

- Establish a Multi-Year NUpath Attribute Review Cycle: Ensure systematic assessment and potential sunsetting of outdated attributes.
- Clarify and Strengthen Learning Objectives: Align course-level objectives with NUpath goals and require ongoing assessment.
- Implement Structural Mechanisms for Cross-College Enrollment: Consider requiring students to take at least some NUpath courses outside their home college.
- Enhance Data Integration: Improve DARS tracking, incorporate Heliocampus assessments, and explore Canvas integration.
- **Reassess Course Approval Criteria:** Explore a policy requiring courses to be taught at least once before gaining NUpath designation.
- Address Enrollment Disparities: Investigate structural reasons for under- and over-enrollment in certain NUpath categories.

These insights reinforce the need for both systematic NUpath governance and clearer curricular structures to ensure NUpath remains a meaningful and effective component of Northeastern's undergraduate education.

Appendix C: Stakeholder Feedback – Faculty Survey

3.10

2.85

2.70

-5.5%

2.81

2.98

6.0%

NEx

WEx

Diff.

Questions pertaining to NUpath were included within the Fall 2024 Faculty Survey. The purpose was to get a general sense on how faculty value and prioritize each NUpath attribute. Due to the number of attributes, a full rank-order wasn't requested. Faculty were asked to determine priority based on a scale of 1 to 4 for each. They were also presented with new topics that may become attributes or integrated into existing attributes. Similarly, they were provided the opportunity to quantitatively rate them on an isolated priority scale, but they were also given the opportunity to provide open-ended feedback on these considerations. Other data like title, college, locations, and experience teaching NUpath attributes were collected. A total of 512 faculty members responded with 279-290 providing feedback on individual attributes. A copy of the NUpath portion of the survey is provided in Appendix I and

Table 4 provides the average responses of the priority ratings for each of the NUpath Attributes. The average for the entire cohort of respondents is provided as well as that of those with no experience teaching that NUpath attribute (NEx) and those that do have experience teaching that NUpath attribute (WEx). The percent difference (Diff.) between the average ratings of those with experience and those without experience is also provided. There was no NUpath attribute that received a clear signal of lacking priority based on this data. The only thing of note was that there were several that were prioritized less by those who have experience teaching that NUpath attribute than those that did not.

NCND NCEI NCIC NCFQ NCSI NCAD NCDD 2.84 3.02 3.21 3.05 3.20 3.17 3.19 Avg **NEx** 2.72 2.86 2.86 2.85 2.81 2.82 2.83 3.29 2.79 2.91 2.89 2.83 WEx 2.81 2.85 19% Diff. -2.6% -1.6% 0.1% 3.5% 2.1% 0.0% **NCER** NCW1 NCW3 **NCWI** WAAD **NCEX NCEC** Avg 3.37 3.09 2.78 3.22

2.79

2.98

6.5%

2.83

2.80

-1.0%

3.08

2.84

2.84

0.1%

Table 4: Average Responses of the Priority Ratings for Each of the NUpath Attributes

2-111	0.070	0.0,0	0.1,0	0.0 / 0	1.0,0	0.0 / 0	, , .
	•	1	•	7 1	ded open-end		
amendment	s or replacem	ents to NUpa	th topics, witl	h only 67 resp	ondents enga	ging in this so	ection. The
most freque	ntly discussed	l topics inclu	ded News/Inf	ormation Lite	eracy (40 resp	onses),	
Sustainabili	ty/Climate (3:	5), Civility/C	onversations/	Empathy (36)), and Finance	(30). Among	these,

Sustainability/Climate (33), Civinty/Conversations/Empathy (36), and Finance (30). Among these, Sustainability/Climate received strong support, with faculty seeing it as an essential area connected to ethical reasoning and interdisciplinary learning. However, some argued that it should be integrated into existing attributes rather than stand alone. Finance was also well supported, particularly regarding its relevance to informed citizenship and fiscal responsibility, but a subset of faculty felt it might be better suited for co-curricular programming rather than being embedded in NUpath.

News/Information Literacy was widely acknowledged as critical in the digital era, with an emphasis on media analysis and discerning propaganda. Few concerns were raised about its inclusion, aside from some noting potential overlap with existing NUpath categories like Ethical Reasoning. Technical

3.06

2.77

3.04

9.4%

2.84

2.83

-0.3%

Literacy was recognized as important for both professional and personal contexts, particularly in relation to digital security and responsible technology engagement. However, some questioned its academic rigor, suggesting it may be more appropriate as a specialized course requirement rather than a core attribute.

The most contentious topics were Civility/Conversations/Empathy, Health and Healthcare, and Adulting 101. While faculty recognized the value of interpersonal skills and civic engagement, many questioned whether these topics aligned with NUpath's academic mission. Some felt these areas were more appropriate as student life initiatives or elective coursework rather than core curriculum requirements. Health and Healthcare was noted as already covered within specific disciplines, particularly health sciences. Adulting 101, the most controversial topic, received strong pushback, with many arguing that it lacked academic rigor and was better suited for workshops or student affairs programming.

The key takeaways from these responses indicate that Sustainability, News/Information Literacy, and Finance received the most support, while Civility, Health, and Adulting drew mixed reactions due to concerns about academic rigor and relevance. Additionally, many faculty suggested integrating these topics into existing attributes rather than creating new standalone categories.

General Feedback

The following summarizes the general faculty feedback on NUpath, analyzing sentiment, concerns, and key takeaways. The feedback was drawn from the 87 faculty who provided open-ended responses to the survey prompt asking for general NUpath Feedback including any suggestions, commentary regarding their prior survey responses, or thoughts generally on updating the NUpath Attributes. Responses were weighted based on experience levels, giving more weight to those with greater tenure and NUpath experience, and constructive engagement, giving more weight to comments that included constructive feedback rather than just a generic positive or negative 'Yea' or 'Nae' detail level comment.

Overall Sentiment Analysis

At a high level, coding the responses for whether faculty has a positive (+1), neutral (0) or negative(-1) opinion of NUpath as a general system and weighting the responses based on experience and constructive engagement, the general sentiment breakdown as follows:

Positive Responses: 53 faculty (61%)
Neutral Responses: 12 faculty (14%)
Negative Responses: 22 faculty (25%)

Even though many did express a positive affiliation with the program and believe it to be theoretically beneficial, faculty expressed significant concerns regarding its structure, execution, and effectiveness.

70 respondents made direct mention of alignment and rigor. Faculty want clearer academic alignment and more rigorous definitions for NUpath attributes. Many suggest refining or consolidating existing attributes before adding new ones. Some feel NUpath categories are too broad and should be narrowed, prioritizing streamlining the framework. Several commented some version of this exemplar quote - "... too broad; narrowing the focus would help clarify its purpose." Faculty emphasized the importance of aligning NUpath attributes with clear academic goals and maintaining a rigorous framework. "The NUpath system needs to ensure alignment with learning outcomes and academic rigor, especially for writing-intensive courses."

Implementation challenges also came up several times (22 mentions) in the more detailed and engaged comments. Course sizes and faculty workload constraints are limiting NUpath's effectiveness. Writing-intensive courses require smaller class caps for proper implementation - "Writing-intensive absolutely needs class caps, as large course sizes counteract the learning objectives.". Departments struggle to offer enough NUpath courses due to resource limitations. Not all of these were supported by the availability data but some, such as course size, are in line with some of the concerns of the limitations of the earlier availability analysis.

Several also expressed concern around the overall NUpath process, something being addressed by one of the other committee charges. 13 expressed frustrations with the approval process and general transparency of it. Faculty are frustrated with the course approval process, citing a lack of transparency and inconsistent criteria. Some believe unclear approval guidelines discourage faculty from proposing new courses. This was most clearly stated by this exemplar comment - "The approval process for NUpath attributes lacks transparency and needs clear criteria for course inclusion." Several responses highlighted the lack of clear rubrics and guidelines for approving or applying NUpath attributes.

A similar number (12 mentions) were concerned with the relevance of the NUpath attributes, both those existing and those proposed, with regards to the student experience. "Are the attributes fostering skills students will apply post-graduation? We need to revisit their purpose." Some faculty question whether NUpath attributes truly benefit students beyond fulfilling graduation requirements. Others suggest a reassessment to ensure attributes align with post-graduation skills, real-world applications, as well as with overall pedagogical goals.

Key Takeaways

- Faculty support NUpath's general goals but remain divided on its execution.
- One in four faculty members provided outright criticism of NUpath's structure, though most engaged constructively with sentiment towards improvement.
- The biggest concerns focus on refining and streamlining existing attributes, rather than adding new ones.
- Implementation challenges—particularly class sizes, transparency, and course approval processes—are major obstacles.
- The Faculty Senate should consider revisiting how NUpath aligns with student outcomes and improving administrative transparency.

Appendix D: Development of a Periodic Review Process for Charge 2

The Charge:

Develop a process for periodic review, revision, and sunsetting of NUpath attributes and make an initial set of recommendations for a revised set of NUpath attributes for the 2025-2026 catalog year.

NUpath attributes have undergone limited formal review since their 2016 implementation. Past assessments have primarily focused on meeting accreditation requirements and responding to emerging curriculum changes, for instance individual college accreditations and the institutional wide New England Commission of Higher Education (NECHE) accreditation. Consequently, these reviews did provide a systematic approach to ensure consistent alignment with university goals.

The current charge emphasizes the need for a structured and periodic review process to revise and potentially sunset NUpath attributes based on data-driven insights and stakeholder feedback.

This section proposes a framework for establishing such a process through the specification and review of assessment-based learning objectives, providing a robust anchoring of the quality, diversity, and differentiation of course offerings and, therefore, the potential success of the NUpath curriculum's mission to "prepare students for personal success in an ever-evolving global society regardless of their chosen field of study."

Thus, we work backwards from the course assessments that provide students, faculty, the University, and accreditors the basis to measure learning objective fulfillment, as detailed in Charge 3 and potentially captured by the University through HelioCampus and CourseLeaf. In doing so, we embrace the logic of the influential taxonomy of learning pioneered by educational psychologist Bloom et al. (1964)³ and developed further by others, including Anderson & Krathwohl (2001)⁴ and Fink (2013)⁵. These taxonomies are explicitly drawn upon and recommended to Northeastern faculty for the drafting of learning outcomes by the Center for Advancing Teaching and Learning Through Research (CATLR).

Focusing on the assessments that provide learning outcome feedback, we develop recommendations for:

- The specification of the current and future NUpath competencies
- The approval of new courses

The periodic review of existing courses and competencies

³ Bloom, B. S., Engelhart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1964). *Taxonomy of educational objectives*. New York: Longmans, Green.

⁴ Anderson, L. W., & Krathwohl, D. R. (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives: complete edition. Addison Wesley Longman, Inc..

⁵ Fink, L. D. (2013). Creating significant learning experiences: An integrated approach to designing college courses. John Wiley & Sons.

Before articulating these recommendations, we discuss the Ad Hoc Committee's process for reviewing current competencies on two dimensions: (1) suitability for the "ever-evolving global society" today and (2) differentiation among competencies to assure distinctive learning across the curriculum that "prepare[s] students for personal success."

Process: We designed a survey of faculty administered Faculty Senate to target both dimensions (See Appendix I for the survey and Appendix C for the results) and also to elicit feedback about new competencies that we thought worth exploring further:

- Sustainability / Climate
- Finance / Financial literacy
- News / Information / Propaganda Assessment
- Technical Literacy / Vetting Technology & Information Security
- Civility / Conversations / Empathy / 'Healthy' Conflicts

After receiving the findings, we met to informally discuss our respective perceptions on NUpath competency adjustments or additions to position students for success in today's global society without overburdening them with requirements. We then conducted an anonymous internal survey that asked each of us, with respect to every competency, (1) whether we saw overlap or potential redundancy between any one of the current NUpath competencies and any other, including the new competencies (but excluding the three integrative ⁶) and (2) whether to consider making a change to the set of required NUpath competencies on account of any such perceived redundancy.

This method and our subsequent discussion demonstrated that, with respect to several current NUpath competencies, we were not confident as a group that we could clearly perceive and explain the intended distinctions to ensure that the different classes students choose to fulfill their NUpath requirements contribute meaningfully to complementary, rather than too similar, learning objectives.

In particular, we had such doubts about the borders and overlaps between the competency on the left-hand column with one or more competency, whether current or proposed by us for consideration, as set forth in the right-hand column:

Current NUpath Attribute	Potential Overlaps	
Engaging Differences and Diversity	 Interpreting Culture Civility / Conversations / Empathy / 'Healthy' Conflicts 	
Understanding Societies and Institutions	 Interpreting Culture Engaging Differences and Diversity 	
Analyzing and Using Data	 Formal/Quantitative Reasoning Conducting Formal and Quantitative Reasoning 	

22

⁶ Writing Across Audiences and Genres; Integrating Knowledge and Skills Through Experience; Demonstrating Thought and Action in a Capstone.

In contrast, we held brief discussion regarding the Designed and Natural World attribute regarding its breadth of coverage, where an argument for Designed World and Natural World as separate entities might be more appropriate. The primary focus was on the potential combination of several as it was a bigger portion of our concerns and those of the faculty feedback.

Substantive Recommendations (3):

The difficulty we had drawing distinctions between the six pairs above, even considering their respective learning outcomes, does not lead us to recommend the removal of any of these requirements.

First Recommendation:

We recommend that the descriptions and learning goals of all competencies be strengthened following a review of the current roster of courses for each NUpath competency to find those exemplar courses that model how an array of assessments can demonstrate the core set of learning outcomes worth specifying for that competency *in a way that accentuates the distinctiveness of the competencies*. This aligns with concerns brought up by the faculty survey respondents, Office of Institutional Assessment and Evaluation, and the Associate Deans of Undergraduate Education (See appendix B and C).

Second Recommendation:

We find that the current learning objectives overwhelmingly reflect content and reasoning-based learning objectives, using verbs like "describe, recognize, discuss, explain, evaluate, connect, and formulate." Compare these verbs with the richness of Fink's (2013) taxonomy of significant learning experiences:

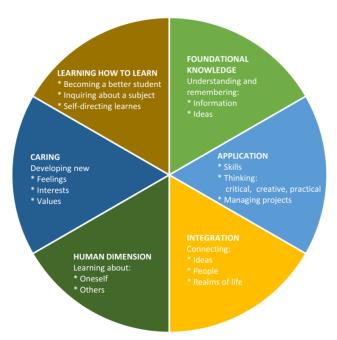


Figure 1: Fink's Taxonomy of Significant Learning - Cite?

We suggest, for example, that the missing piece that might help differentiate Engaging Differences and Diversity from Interpreting Culture would be learning outcomes specifications that fit the Caring and Human Dimension areas. Certainly, the motivation behind our continued interest in considering an

addition along the lines of Civility / Conversations / Empathy / 'Healthy' Conflicts is the Committee's consensus that part of what the NUpath curriculum should do to prepare our undergraduates for success in today's world is to practice having hard conversations about sensitive matters in ways that redefining Engaging Differences and Diversity could potentially accomplish, assuming there are courses that exemplify this way of understanding the spirit of the competency. With respect to all six pairs of competencies noted above and, more generally, to reinvigorate the meaning and spirit of the NUpath curriculum overall, we strongly recommend broadening the range of significant learning experiences that define NUpath courses.

Third Recommendation:

In addition to previous remarks about the importance of preparing our undergraduates to display the interpersonal, emotionally-grounded competency to engage civilly with difference, our third recommendation is to strongly consider adding a competency that targets Sustainability / Climate. We were aligned as a committee in considering that undergraduates should leave Northeastern with meaningful understanding and caring about the bearing of human action on the health of the planetary ecosystem, with a set of learning objectives that could realistically be pursued through courses in any of Northeastern's eight Boston-based faculties. This received the strongest level of support in the faculty survey and was also supported by student interests (See appendix B and C). A student-led initiative, SustainUbility, contacted the committee with their proposal for creating a standalone NUpath attribute. They strongly feel a sustainability-focused NUpath requirement would better align with Northeastern's environmental mission and growing student interest in climate education. They provided a petition with 1,482 signatures in support as well as showed it received 66% support (5,149 votes) in a Student Government Association referendum (See Appendix K).

Process-based Recommendations (1):

Our **principal process-based recommendation** is that approval of all new courses should be based, in part, on the specific assessments the course is designed around. As soon as possible, the assessments that evidence the learning objectives for all NUpath courses should be documented in concert with the Office of Institutional Assessment and Evaluation and integrated with tools like Heliocampus or Courseleaf. We are concerned that there is little guarantee that courses will succeed in achieving the purpose of the requirement, or that different offerings of a given course will achieve what was first proposed, *without* explicitly connecting assessments to learning outcomes in a systematically auditable way. Moreover, the task of institutional assessment required for accreditation and internal quality control cannot be achieved without this step, and taking this step dovetails with our recommendations below on Charge 3. This recommendation extends to existing courses as well, requiring the task of ensuring they meet any new standard to ensure equity.

The value of this recommendation will only be fully realized after the first two substantive recommendations above are completed, i.e., strengthening the learning objectives of NUpath competencies upon identifying exemplar courses that clearly match well-designed assessments with the core set of learning outcomes that captures the spirit of the competency (recommendation 1) and through a broader conception of learning (recommendation 2).

In terms of frequency, we recommend that the NUpath curriculum should be reviewed as proposed in this Charge and Charge 1 every five years, *after the initial review proposed in this Charge is completed.* The five-year interval we propose is consistent with the review patterns followed by Harvard University and Boston University (see Appendix C). It was also specifically noted within the focus

group of Associate Deans of Undergraduate Education as a desired procedure and the interval is within the range they discussed. This review should factor in the assessment and outcome measures made available by the process-based recommendations.

Appendix E: Evaluation of Course Approval Processes as part of Charge 3

The Charge:

In consultation with the Vice Provost for Curriculum and Programs, review the processes and practices for approving courses that fulfill NUpath attributes and recommend revisions as necessary.

The approval process for NUpath-designated courses plays a crucial role in ensuring that general education requirements align with Northeastern University's learning goals. A well-structured and transparent approval system is essential for maintaining consistency and fairness in course evaluation, ensuring that students gain meaningful educational experiences. The following discussion and recommendations are informed by feedback from the various stakeholder groups surveyed and interviewed as well as detailed reviews of the process by members of the committee.

Faculty members have reported challenges navigating the approval process due to inconsistencies in guidance, unclear expectations, and limited transparency regarding proposal review criteria. Strengthening the course approval framework will not only improve faculty experience but also enhance the integrity of NUpath as a comprehensive educational framework. in ensuring that general education requirements align with Northeastern University's learning goals. A well-structured and transparent approval system is essential for maintaining consistency and fairness in course evaluation, ensuring that students gain meaningful educational experiences.

Faculty interested in creating a course or adding NUpath to current course can find the overview of the process on the NU Core Curriculum Website - https://core.northeastern.edu/faculty/. The landing pages provide the 4-step summary for submission and approval. Before specific feedback is offered regarding the individual steps, *the committee recommends consideration for the following*. bBased on faculty feedback and committee review, we have identified key areas for improvement, particularly concerning the accessibility of guidance materials, the efficiency of CourseLeaf integration, and faculty support for structuring proposals.

General Recommendations

1. Improve Faculty Guidance on Course Approval

The committee recommends updating the *Guide for Preparing NUpath Proposals* to ensure better alignment with:

- The specific inputs required in CourseLeaf, so faculty members can prepare more effectively before accessing the system.
- Course syllabus expectations, clarifying what needs to be included to demonstrate alignment with NUpath learning objectives.

Additionally, the language used throughout the guide should be updated to reflect best practices in instructional design, including:

• Clearly stated learning objectives that align with Bloom's Taxonomy.

- Explicit mapping of learning objectives to assessments to ensure they demonstrate student learning.
- A stronger focus on outcomes-based justification rather than broad course content descriptions.

2. Increase Transparency in the Approval Process

While the NUpath website provides a high-level overview of the approval process, faculty frequently report a lack of clarity regarding decision-making criteria and inconsistencies in approval standards across colleges. Additionally, there is limited visibility into how many proposals are accepted, rejected, or require revisions, making it difficult to assess trends in course approval over time. To improve transparency and accountability:

- Develop a more structured rubric for evaluating proposals, ensuring consistency across different reviewers and departments.
- Introduce a status-tracking mechanism within CourseLeaf, allowing faculty to monitor where their proposal stands in the approval pipeline.
- Publish periodic reports on NUpath course approvals, including anonymized data on the number of proposals submitted, accepted, revised, and rejected. This will provide faculty with a clearer understanding of approval trends and inform future process improvements.
- Consider implementing a formal review timeline, similar to peer institutions, where approved NUpath courses undergo a structured reassessment after a designated period (e.g., every five years). This would ensure continued alignment with NUpath objectives and provide a mechanism for ongoing quality assurance.

Additionally, while Steps 1 and 2 of the submission process (reviewing NUpath goals and aligning course activities) require no modification with regards to this, Step 3 (Guide for Preparing NUpath Proposals) and Step 4 (CourseLeaf Submission) need significant updates to better reflect what faculty will encounter when entering their proposal.

3. Expand Faculty Development and Support

The committee strongly recommends:

- Collaborating with CATLR to develop workshops and training sessions on designing courses that meet NUpath standards.
- Providing annotated examples of successful proposals, illustrating how faculty can structure justifications for different NUpath attributes.
- Hosting faculty information sessions at the start of each semester to address common questions and provide real-time guidance on proposal preparation.
- Periodically survey faculty experiences with the approval process to identify recurring challenges and refine support mechanisms over time.

4. Integrate NUpath Assessment with Canvas and HelioCampus

To streamline ongoing assessment of NUpath courses, the committee recommends exploring integration with:

• Canvas learning assessments, allowing direct tracking of NUpath-aligned assignments.

• HelioCampus, which could provide centralized data on student learning outcomes, improving long-term assessment and review of NUpath courses.

5. Clarify Approval Pathways at the College and University Levels

The NUpath website focuses primarily on the final review at the Provost level (UUCC), but faculty must first navigate curriculum approvals at the department and college levels. The committee recommends:

- Expanding NUpath faculty resources to include a clear outline of college-level curriculum approval requirements before the proposal reaches the university level.
- Providing guidance on best practices for departments and colleges to streamline internal approvals before submission.
- Recognizing that preparing NUpath proposals places an added administrative burden on faculty, particularly for courses that require additional assessment artifacts. Future refinements to the approval process should consider ways to balance rigor with faculty workload, such as phased implementation of assessment requirements or streamlined reapproval processes.

Recommendations based on the Current Step by Step Procedure:

Under the NUpath website for Faculty 'How to submit a course for NUpath attributes' – The committee has the following comments about each step.

Step 1 - Review NUpath Requirements and Framework

No Changes

Step 2 - Match course materials and activities to Learning Goals for the NUpath Requirement(s)

No Changes

Step 3 - Guide for Preparing NUpath

While the Step 3 'Guide for Preparing NUpath' includes the best practices and justifications for the proposal, the 'Guide' should include the specific questions / format that mirrors what a faculty member will see once logged into Courseleaf, or at least explicitly acknowledge the discrepancies to acknowledge if simply expanding on the Courseleaf content.

Currently, the provided 'Guide for Preparing NUpath' contains the following prompts regarding the development of NUpath proposals:

- "We recommend the following general procedure for developing NUpath proposals:
 - 1. Spend some time thinking about what you want your students to learn in the course.
 - 2. Review the relevant NUpath goals and ask yourself:
 - a. Will students have the opportunity to meet these learning goals in this course?

 Note: if your answer is "no," this may not be the right requirement for this course, or perhaps the course could benefit from some revision. The UUCC often asks, "Are we comfortable with the possibility that this course is the only course students might take in this category?" If you cannot convince

yourself that this course clearly allows students to meet the learning goals for a particular requirement, you should not propose it for that attribute.

- b. Which assignments or activities are designed to help students meet the learning goals?
- c. What will students do and produce to demonstrate that they have acquired that knowledge and those skills?
- 3. For each learning goal in the relevant requirement, write a brief but detailed justification of how the students will achieve the learning goals (e.g. write papers, make drawings, write code, craft proofs, engage in debates, create business plans, conduct lab experiments). As we explain in the FAQ, you have the option of combining your justification into one answer, but we find that proposals have a better chance of approval when each learning goal is addressed separately.

As you craft your justifications, here are some tips to keep in mind:

- Focus your justification of what students do in the course, not on what the course covers or what you will teach them.
- Use concrete verbs (instead of "students learn about," say "students make drawings and construct models that demonstrate their understanding of...")
- Provide specific examples when possible. For instance, if the learning goal is to "evaluate and compare two or more theories of human difference," (DD, goal c) then it is useful to state which theories students will evaluate and compare and how. If different instructors may focus on different theories, it is fine to say something like, "In their final papers, students will evaluate theories such as x, y, and z."
- Respond directly to the learning goals without simply repeating them. For example, if a learning goal states that students should "acquire and assess techniques of interpretation," (IC, goal b) the justification should identify those techniques of interpretation and how they will be learned—e.g., "students will learn to conduct literary analysis, including close reading, through a series of short, critical papers on selected major works of the Harlem Renaissance."
- Keep the justifications brief but detailed; avoid expansive explanation or commentary about course content.
- Finally, remember that your proposal will be read by people outside your discipline. While it may seem obvious to you that your course falls squarely in the NUpath category, this may not be apparent to those in other disciplines. Make sure your justification is accessible and clear to non-expert readers."

On Courseleaf, the current guidance is as follows:

"II. Briefly describe how the students will engage with the content of the course (e.g., project, discussion, writing, homework, etc.) to achieve the following learning goals. Please note that while the committee is looking for evidence that students have the opportunity to meet all of the learning goals, there is no expectations that equal weight will be given to each goal in the course."

This is a large discrepancy in material and level of detail between the document and the Courseleaf prompt.

Step 4 – Upload Information for Consideration of the NUpath Attributes

It is not clear that NUpath needs to be entered separately into Courseleaf, and it needs to be incorporated into your uploaded syllabus. Additionally, mapping learning objectives to the course assessments and demonstrating learning has occurred should be included as part of the course syllabus.

Suggested modification to the 'Guide for Preparing NUpath':

- Question #3 in 'Guide' bullet #1: consider changing it to from 'focus on your justification on what student do in the course' to 'what are the 'outcomes' or what will the student be able to do after completing this course' and name it as 'the learning objectives' for the course.
- Question #3 in 'Guide' bullet #2: modify from 'use concrete verbs' to use Bloom's Taxonomy of Verbs in the writing of learning objectives. And then there should be guidance on how students will be assessed to demonstrate learning has occurred (or that the learning objectives have been met) vs simply stating 'provide examples when possible' it should have specific assessment plans for measuring that the learning objectives / outcomes have been met.

Additional Recommendations to Consider:

The website provides a detailed course approval process once it reaches the Provost level, however there should be language about it having to go through the curriculum process at the program, college levels PRIOR to Provost (UUCC) for review.

Additionally, there is a lack of clarity on how rejected proposals receive feedback and guidance for resubmission. A standardized feedback template that includes actionable steps for improving rejected applications should be implemented or, if already a part of the Coarseleaf process, made clear in the guidance, beyond the provided "How Not to Write a Proposal" section.

The inclusion of assessment artifacts as part of the course approval process presents both opportunities and challenges. While such artifacts provide valuable insight into how student learning aligns with NUpath goals, they may not be readily available for newly developed courses. This places an additional burden on NUpath-designated courses beyond standard course approval requirements. One potential solution, as discussed in a recent Dean's focus group, is to require that NUpath designation only be applied for after a course has been offered at least once. This approach would ensure that faculty have collected all necessary curricular artifacts, allowing for a more thorough evaluation. Peer institutions have taken varying approaches to this challenge, with some requiring pilot offerings before general education designation is granted. Another alternative is to integrate assessment planning into the initial proposal phase, with required artifacts submitted after the first iteration of the course. This phased approach would reduce initial faculty burden while still ensuring alignment with NUpath outcomes.

Peer Institution Comparisons and Recommendations

To ensure that NUpath course approvals align with best practices in general education governance, the committee reviewed peer institutions' course approval models. Institutions such as Harvard University, Boston University, and the University of Massachusetts Amherst provide structured frameworks that increase transparency, faculty engagement, and efficiency in approvals (See Appendix F and G).

Key findings and recommendations based on peer institutions include:

- **Harvard University**: Uses a standing committee review model, where initial course approvals undergo a structured evaluation, and subsequent offerings are periodically re-reviewed.
 - o *Recommendation*: Implement a periodic re-review process for approved NUpath courses to ensure continued alignment with learning objectives.
- **Boston University**: Conducts faculty-led curriculum workshops to assist instructors in structuring proposals. Additionally, BU maintains a publicly accessible course approval rubric to increase clarity in the decision-making process.
 - o *Recommendation*: Develop faculty training workshops with CATLR and publish an explicit rubric for evaluating NUpath proposals.
- University of Massachusetts Amherst: Requires that all general education proposals include a measurable assessment plan and integrates faculty feedback loops to refine course design preapproval.
 - o *Recommendation*: Require that NUpath proposals include defined assessment criteria and integrate faculty feedback mechanisms before final submission.

By incorporating these best practices, NUpath course approvals can be improved through greater transparency, structured assessment expectations, and enhanced faculty support.

Appendix F: Comparable Programs of Peer Institutions

Northeastern University has identified several peer and aspirant institutions with comparable programs to NUpath. These include Boston University, Drexel University, and the University of Cincinnati as peers, with aspirational peers such as Stanford University and the Massachusetts Institute of Technology (Northeastern 2025 Strategic Plan)⁷. Northeastern's focus on cooperative education aligns it with leading co-op institutions, including Drexel University, the University of Cincinnati, and Georgia Institute of Technology. These institutions emphasize structured, general education requirements to provide students with a broad-based education that complements their major-specific studies.

General Education

Boston University

BU's general education framework, known as the BU Hub, is integrated into the entire undergraduate experience. The BU Hub requires students to complete coursework across six essential capacities: Philosophical, Aesthetic, and Historical Interpretation; Scientific and Social Inquiry; Quantitative Reasoning; Diversity, Civic Engagement, and Global Citizenship; Communication (written, oral, and multimedia); and an Intellectual Toolkit that includes critical thinking, collaboration, and creativity (Boston University, 2016)⁸.

- General Education: Integrated across six capacities, but specific credit-hour totals vary by program.
- Graduation Requirements: ~120 credits.
- General Education Percentage: ~20-25% (depending on program).

Drexel University

Drexel's general education curriculum includes mandatory courses in areas such as civic engagement, communication, and foundational sciences. For example, all students must take CIVC 101 (Introduction to Civic Engagement) and ENGL 101 (College Writing). These general education courses constitute part of the 180-credit requirement for most undergraduate programs, ensuring foundational knowledge across disciplines (Drexel University, 2023)⁹.

- General Education: Includes mandatory civic engagement, communication, and foundational sciences courses.
- Graduation Requirements: ~180 credits.
- General Education Percentage: ~20-25%.

⁷ Northeastern University. "Northeastern 2025 Strategic Plan." 2025. Available at: https://strategicplan.northeastern.edu/

⁸ Boston University. "Final Report of the Task Force on General Education." Office of the Provost, 2016. Available at: https://www.bu.edu/provost/2016/03/04/final-report-of-the-task-force-on-general-education. Accessed Oct. 2024

⁹ Drexel University. "Guide to General Education Requirements." 2023. Available at: https://drexel.edu/~/media/Files/westphal/dept/studentservices/Guide%20to%20General%20Education%20Requirements.ash x. Accessed Oct. 2024

University of Cincinnati

The University of Cincinnati has a General Education Core that emphasizes critical thinking, effective communication, and social responsibility. Students are required to complete 69 credit hours as part of the General Education Breadth of Knowledge (BOK) core requirements. These credits integrate into the total 120 semester credits needed for graduation, alongside major-specific courses and electives (University of Cincinnati, 2024)¹⁰.

- General Education Core: 69 credit hours.
- Graduation Requirements: ~120 semester credits.
- General Education Percentage: ~58%

Stanford University

Stanford's General Education Requirements are designed to introduce students to the intellectual life of the university and to provide a broad foundation across various disciplines (Stanford University, 2024)¹¹. These requirements include:

- Civic, Liberal, and Global Education (COLLEGE): First-year students must complete courses that encourage critical thinking about complex societal issues.
- Writing Requirement: Students are required to complete courses in writing and rhetoric to develop effective communication skills.
- Language Requirement: Proficiency in a foreign language is required, which can be demonstrated through coursework or examination.
- Ways of Thinking/Ways of Doing: Students must complete 11 courses across eight categories, including Aesthetic and Interpretive Inquiry, Social Inquiry, Scientific Method and Analysis, and Ethical Reasoning, among others.
- **General Education:** 11 courses (estimated ~45 credits across categories like COLLEGE, Writing, and Ways of Thinking).
- **Graduation Requirements:** ~180 units (~120 credits).
- General Education Percentage: ~25%.

Massachusetts Institute of Technology (MIT)

MIT's General Institute Requirements (GIRs) serve as the foundational curriculum for all undergraduates, ensuring a comprehensive education that balances specialized knowledge with broadbased learning. In essence, MIT's GIRs are designed to cultivate both depth in specialized fields and breadth across diverse disciplines, fostering versatile thinkers equipped to drive innovation and address global challenges. ¹² These requirements include:

¹⁰ University of Cincinnati. "General Education Core Requirements." 2024. Available at: https://www.uc.edu/about/provost/colleges-and-offices/offices/undergraduate-affairs/gen-ed-core-rd.html. Accessed Oct 2024

¹¹ Stanford University. "Undergraduate General Education Requirements." 2024. Available at: https://bulletin.stanford.edu/academic-polices/degree-requirements/general-education. Accessed Oct 2024

¹² Massachusetts Institute of Technology. "MIT Admissions: General Institute Requirements." 2024. Available at: https://mitadmissions.org/discover/the-mit-education/general-institute-requirements/. Accessed Oct. 2024

- MIT's General Institute Requirements (GIRs) ensure that all undergraduates develop a strong foundation in science, mathematics, and the humanities. The GIRs include:
- Science Core: Six subjects covering Biology, Chemistry, Physics, and Mathematics.
- Humanities, Arts, and Social Sciences (HASS) Requirement: Eight subjects to ensure breadth in these areas, with at least two designated as Communication-Intensive (CI-H).
- Laboratory Requirement: A minimum of 12 units in laboratory subjects to provide practical experience.
- Communication Requirement: Integrated into both the HASS Requirement and the student's major, focusing on developing writing and speaking skills.
- **General Education:** Core courses in science, math, and humanities (~12-15 subjects, estimated ~60 credits).
- Graduation Requirements: ~180-195 units (~120-130 credits).
- General Education Percentage: ~45-50%.

Georgia Institute of Technology (Georgia Tech)

Georgia Tech's general education curriculum is designed to deliver foundational knowledge and skills to undergraduate students in all majors¹³. The core curriculum includes:

- Core Areas A-E: Courses in Communication, Quantitative Skills, Institutional Options, Humanities/Fine Arts, and Social Sciences.
- Wellness Requirement: A 2-credit health course (APPH 1040 or 1050) to promote student wellbeing.
- Ethics Attribute: Certain courses carry an ethics attribute, ensuring students engage with ethical reasoning within their disciplines.
- General Education: Core Areas A-E (~42 credits).
- Graduation Requirements: ~120 credits.
- General Education Percentage: ~35%.

These institutions emphasize structured general education requirements to provide students with a broad-based education that complements their major-specific studies.

Comparison to Peer Institutions

NUpath compares favorably to general education programs at institutions such as MIT and Boston University. The major critical comparison would be that many others have a more concise and targeted general education requirement.

Key advantages include:

• Integration with Standard Curriculum:

Attributes like NCW1 (1st Year Writing), NCCE (Capstone Experience), and NCEX (Integration Experience) are naturally achieved through required coursework and co-op experiences. This

¹³ Georgia Insitute of Technology. "University System of Georgia General Education Curriculum - Core IMPACTS - Requirements, Georgia Legislative Requirements and other Georgia Tech Requirements." 2024. Available at: https://catalog.gatech.edu/academics/undergraduate/core-curriculum/. Accessed Oct. 2024

integration is not uncommon among institution by individual major curriculum design but the inclusion of core undergraduate experiences as part of the core curriculum is less common.

• Flexibility:

Students can often meet multiple NUpath requirements within a single course, reducing the burden of additional coursework outside their primary academic plans. Our program in general is designed to leverage topics and utilize existing content while peer institutions often require separate courses for each general education category, which can increase the overall workload for students.

Appendix G: Periodic Review in Comparable Programs

This section explores periodic review processes at peer institutions to ensure continuous improvement and alignment with educational objectives. Among our immediate peer and local universities, Harvard University and Boston University are the only two whose periodic review processes were publicly available. The review processes for the University of Massachusetts Amherst were also publicly available. Beyond these, the review processes for our identified peer institutions were not readily available or the information available was not specific enough to be comparatively useful for our goals.

Harvard University

Harvard's Program in General Education employs a Standing Committee to review courses periodically. Initial reviews occur after a course's first offering and then every three offerings. The review evaluates alignment with the program's mission, grading rigor, and workload. Based on findings, courses may be approved for up to five additional offerings or require further review (Harvard University, 2025)¹⁴.

Boston University

Boston University completed a rigorous review of its general education program through a 15-month consultation process involving faculty from all schools and colleges. This review led to the establishment of the BU Hub, a university-wide general education framework designed to integrate foundational and interdisciplinary learning across six essential capacities (Boston University, 2025)¹⁵.

University of Massachusetts Amherst

UMass Amherst employs a Quinquennial (every five years) Review Process, wherein the General Education Council evaluates all courses to ensure alignment with programmatic objectives. This review includes departmental input to verify the consistency of Integrative Experience courses and broader curriculum alignment with the General Education Breadth of Knowledge requirements (UMass Amherst, 2025)¹⁶.

¹⁴ Harvard University. "Course Review Process." Harvard College Program in General Education, 2025. Available at: https://gened.college.harvard.edu/instructor-resources/course-review

¹⁵ Boston University. "Final Report of the Task Force on General Education." Office of the Provost, 2016. Available at: https://www.bu.edu/provost/2016/03/04/final-report-of-the-task-force-on-general-education. Accessed September 2024

¹⁶ University of Massachusetts Amherst. "Integrative Experience & Quinquennial Review Processes." General Education Council, 2025. Available at: https://www.umass.edu/gened/ie-qq-review-process

Appendix H: NUpath Course Distribution Tables

All the following tables are based off the Active Course State Freeze tableau - https://tableau.northeastern.edu/t/Registrar/views/ActiveCourseStatFreeze/ActiveCourseStatFreeze/

The following data is intentionally limited to offerings during the Fall 2023 and Spring 2024 terms. Summer 1 and Summer 2 session data were used in discussion above, but not in broad terms, only utilizing targeted summary data points for the sake of expanding specific talking points. These are expanded versions of the summary tables provided earlier in the report in Appendix A, providing the course, section, and enrollment data for NUpath attributes as distributed across the various colleges.

Course Breakdown

Table 5: Distribution of NUpath Courses Across Colleges (As raw counts)

Course - #	Total	Bouvé College of Hlth Sciences	Coll of Arts, Media & Design	Coll of Professional Studies	Coll of Soc Sci & Humanities	College of Engineering	College of Science	D'Amore- McKim School Business	Khoury Coll of Comp Sciences	Office of the Provost	Mills College at Northeastern
Total	1030	60	254	2	369	38	216	25	51	14	1
NCND	114	11	14	0	3	1	80	0	5	0	0
NCEI	129	2	99	0	14	1	8	2	0	3	0
NCIC	160	6	60	0	85	0	6	2	0	1	0
NCFQ	57	4	5	0	7	1	29	0	11	0	0
NCSI	197	6	34	0	144	0	8	1	1	2	1
NCAD	125	5	20	0	19	7	48	3	22	1	0
NCDD	164	10	29	1	118	0	3	0	0	2	1
NCER	88	5	22	0	45	5	3	4	3	1	0
NCW1	5	0	0	0	5	0	0	0	0	0	0
NCW3	15	0	3	0	12	0	0	0	0	0	0
NCWI	140	8	39	0	33	11	31	6	12	0	0
NCEX	100	5	10	1	46	7	17	7	1	6	0
NCCE	109	10	24	0	19	9	28	3	16	0	0

Table 6: Distribution of NUpath Courses Across Colleges (As percentage of NUpath courses available)

Course - %	Total	Bouvé College of Hlth Sciences	Coll of Arts, Media & Design	Coll of Professional Studies	Coll of Soc Sci & Humanities	College of Engineering	College of Science	D'Amore-McKim School Business	Khoury Coll of Comp Sciences	Office of the Provost	Mills College at Northeastern
Total	100.0%	5.8%	24.7%	0.2%	35.8%	3.7%	21.0%	2.4%	5.0%	1.4%	0.1%
NCND	11.1%	9.6%	12.3%	0.0%	2.6%	0.9%	70.2%	0.0%	4.4%	0.0%	0.0%
NCEI	12.5%	1.6%	76.7%	0.0%	10.9%	0.8%	6.2%	1.6%	0.0%	2.3%	0.0%
NCIC	15.5%	3.8%	37.5%	0.0%	53.1%	0.0%	3.8%	1.3%	0.0%	0.6%	0.0%
NCFQ	5.5%	7.0%	8.8%	0.0%	12.3%	1.8%	50.9%	0.0%	19.3%	0.0%	0.0%
NCSI	19.1%	3.0%	17.3%	0.0%	73.1%	0.0%	4.1%	0.5%	0.5%	1.0%	0.5%
NCAD	12.1%	4.0%	16.0%	0.0%	15.2%	5.6%	38.4%	2.4%	17.6%	0.8%	0.0%
NCDD	15.9%	6.1%	17.7%	0.6%	72.0%	0.0%	1.8%	0.0%	0.0%	1.2%	0.6%
NCER	8.5%	5.7%	25.0%	0.0%	51.1%	5.7%	3.4%	4.5%	3.4%	1.1%	0.0%
NCW1	0.5%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NCW3	1.5%	0.0%	20.0%	0.0%	80.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NCWI	13.6%	5.7%	27.9%	0.0%	23.6%	7.9%	22.1%	4.3%	8.6%	0.0%	0.0%
NCEX	9.7%	5.0%	10.0%	1.0%	46.0%	7.0%	17.0%	7.0%	1.0%	6.0%	0.0%
NCCE	10.6%	9.2%	22.0%	0.0%	17.4%	8.3%	25.7%	2.8%	14.7%	0.0%	0.0%

Section Breakdown

Table 7: Distribution of NUpath Sections Across Colleges (As raw counts)

Section - #	Total	Bouvé College of Hlth Sciences	Coll of Arts, Media & Design	Coll of Professional Studies	Coll of Soc Sci & Humanities	College of Engineering	College of Science	D'Amore-McKim School Business	Khoury Coll of Comp Sciences	Office of the Provost	Mills College at Northeastern
Total	3571	301	640	5	694	185	1027	239	264	214	2
NCND	340	40	40	0	14	1	202	0	43	0	0
NCEI	469	24	346	0	18	3	43	31	0	4	0
NCIC	310	31	103	0	127	0	6	42	0	1	0
NCFQ	281	9	11	0	17	1	166	0	77	0	0
NCSI	469	35	71	0	307	0	35	12	3	4	2
NCAD	784	11	41	0	89	33	455	54	100	1	0
NCDD	303	48	66	4	178	0	3	0	0	2	2
NCER	235	13	38	0	94	31	7	44	6	2	0
NCW1	144	0	0	0	144	0	0	0	0	0	0
NCW3	212	0	8	0	204	0	0	0	0	0	0
NCWI	442	44	87	0	67	33	92	64	55	0	0
NCEX	493	55	12	1	68	41	100	12	1	203	0
NCCE	420	61	57	0	51	58	89	34	70	0	0

Table 8: Distribution of NUpath Sections Across Colleges (As percentage of NUpath Sections available)

Section - %	Total	Bouvé College of Hlth Sciences	Coll of Arts, Media & Design	Coll of Professional Studies	Coll of Soc Sci & Humanities	College of Engineering	College of Science	D'Amore-McKim School Business	Khoury Coll of Comp Sciences	Office of the Provost	Mills College at Northeastern
Total	100.0%	8.4%	17.9%	0.1%	19.4%	5.2%	28.8%	6.7%	7.4%	6.0%	0.1%
NCND	9.5%	11.8%	11.8%	0.0%	4.1%	0.3%	59.4%	0.0%	12.6%	0.0%	0.0%
NCEI	13.1%	5.1%	73.8%	0.0%	3.8%	0.6%	9.2%	6.6%	0.0%	0.9%	0.0%
NCIC	8.7%	10.0%	33.2%	0.0%	41.0%	0.0%	1.9%	13.5%	0.0%	0.3%	0.0%
NCFQ	7.9%	3.2%	3.9%	0.0%	6.0%	0.4%	59.1%	0.0%	27.4%	0.0%	0.0%
NCSI	13.1%	7.5%	15.1%	0.0%	65.5%	0.0%	7.5%	2.6%	0.6%	0.9%	0.4%
NCAD	22.0%	1.4%	5.2%	0.0%	11.4%	4.2%	58.0%	6.9%	12.8%	0.1%	0.0%
NCDD	8.5%	15.8%	21.8%	1.3%	58.7%	0.0%	1.0%	0.0%	0.0%	0.7%	0.7%
NCER	6.6%	5.5%	16.2%	0.0%	40.0%	13.2%	3.0%	18.7%	2.6%	0.9%	0.0%
NCW1	4.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NCW3	5.9%	0.0%	3.8%	0.0%	96.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NCWI	12.4%	10.0%	19.7%	0.0%	15.2%	7.5%	20.8%	14.5%	12.4%	0.0%	0.0%
NCEX	13.8%	11.2%	2.4%	0.2%	13.8%	8.3%	20.3%	2.4%	0.2%	41.2%	0.0%
NCCE	11.8%	14.5%	13.6%	0.0%	12.1%	13.8%	21.2%	8.1%	16.7%	0.0%	0.0%

Enrollment Breakdown

Table 9: Distribution of NUpath Enrollments Across Colleges (As raw counts)

Enrollment - #	Total	Bouvé College of Hlth Sciences	Coll of Arts, Media & Design	Coll of Professional Studies	Coll of Soc Sci & Humanities	College of Engineering	College of Science	D'Amore-McKim School Business	Khoury Coll of Comp Sciences	Office of the Provost	Mills College at Northeastern
NUpath	91325	5653	12331	83	16918	3612	24846	7213	15914	4743	12
NCND	16160	1075	589	0	385	6	10607	0	3498	0	0
NCEI	9023	479	6262	0	296	133	722	1066	0	65	0
NCIC	8053	683	3068	0	2574	0	199	1514	0	15	0
NCFQ	12227	461	240	0	587	40	5553	0	5346	0	0
NCSI	14912	941	2034	0	9977	0	1452	366	60	70	12
NCAD	21847	558	606	0	3804	890	7159	1374	7445	11	0
NCDD	6641	967	1648	74	3808	0	105	0	0	27	12
NCER	6947	305	1161	0	2541	949	208	1587	159	37	0
NCW1	2561	0	0	0	2561	0	0	0	0	0	0
NCW3	3765	0	157	0	3608	0	0	0	0	0	0
NCWI	10456	856	1297	0	1343	905	2033	1589	2433	0	0
NCEX	6869	382	149	9	866	241	224	431	1	4566	0
NCCE	8164	668	627	0	609	887	992	1166	3215	0	0

Table 10: Distribution of NUpath Sections Across Colleges (As percentage of NUpath Sections available)

Enrollment - %	Total	Bouvé College of Hlth Sciences	Coll of Arts, Media & Design	Coll of Professional Studies	Coll of Soc Sci & Humanities	College of Engineering	College of Science	D'Amore-McKim School Business	Khoury Coll of Comp Sciences	Office of the Provost	Mills College at Northeastern
Total	100.0%	6.2%	13.5%	0.1%	18.5%	4.0%	27.2%	7.9%	17.4%	5.2%	0.0%
NCND	17.7%	6.7%	3.6%	0.0%	2.4%	0.0%	65.6%	0.0%	21.6%	0.0%	0.0%
NCEI	9.9%	5.3%	69.4%	0.0%	3.3%	1.5%	8.0%	11.8%	0.0%	0.7%	0.0%
NCIC	8.8%	8.5%	38.1%	0.0%	32.0%	0.0%	2.5%	18.8%	0.0%	0.2%	0.0%
NCFQ	13.4%	3.8%	2.0%	0.0%	4.8%	0.3%	45.4%	0.0%	43.7%	0.0%	0.0%
NCSI	16.3%	6.3%	13.6%	0.0%	66.9%	0.0%	9.7%	2.5%	0.4%	0.5%	0.1%
NCAD	23.9%	2.6%	2.8%	0.0%	17.4%	4.1%	32.8%	6.3%	34.1%	0.1%	0.0%
NCDD	7.3%	14.6%	24.8%	1.1%	57.3%	0.0%	1.6%	0.0%	0.0%	0.4%	0.2%
NCER	7.6%	4.4%	16.7%	0.0%	36.6%	13.7%	3.0%	22.8%	2.3%	0.5%	0.0%
NCW1	2.8%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NCW3	4.1%	0.0%	4.2%	0.0%	95.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NCWI	11.4%	8.2%	12.4%	0.0%	12.8%	8.7%	19.4%	15.2%	23.3%	0.0%	0.0%
NCEX	7.5%	5.6%	2.2%	0.1%	12.6%	3.5%	3.3%	6.3%	0.0%	66.5%	0.0%
NCCE	8.9%	8.2%	7.7%	0.0%	7.5%	10.9%	12.2%	14.3%	39.4%	0.0%	0.0%

Appendix I: Fall 2024 Faculty Survey Prompts

The Fall 2024 Faculty Survey Data provided the committee the following demographic data:

- Faculty Status
- Current Faculty Rank
- College/School of Faculty Appointment(s)
- Major Departments/Units in which Respondents Teach
- Gender Identity
- University Campus

The NUpath Committee provided the following prompts to the Faculty Survey:

We are currently reviewing Northeastern's academic core curriculum, known as NUpath. The attributes that comprise the NUpath requirements are built around **essential**, **broad-based knowledge and skills**—such as understanding societies and analyzing data—**integrated** with specific content areas and disciplines. This program aims to develop within our students the broad knowledge, intellectual creativity, and multi-faceted skills that prepare them to be **engaged global citizens and leaders**, **successful professionals**, **and lifelong learners**. It has been several years since this program was started, and much has changed in our world. What was required then to prepare our students may differ from what is needed today. The Faculty Senate's NUpath Committee seeks your input on the current attributes and potential new ones. The following will help the committee determine whether existing attributes should remain, be modified, or be removed and whether any potential new attributes will be added. These survey results will inform the committee's recommendations to the faculty senate.

Current NUpath Attributes The following are the existing NUpath Attributes. Please indicate the priority level for each of the existing attributes, with 1 being a very low priority and 4 being a very high priority. Please also indicate how many times you have taught an NUpath course with that attribute. You can familiarize yourself with their descriptions and learning goals

here: https://catalog.northeastern.edu/undergraduate/university-academics/NUpath/learning-goals/. Please note that the "9. Writing Across Audiences/Genres" path is broken into 3 sub-paths, each with their own requirement within NU Path, so we're addressing them individually below.

	Indicate I	Priority with and 4 being	How ma with thi have yo	1			
	1	2	3	4	0	1-3	3+
1. Engaging with the Natural and Designed World (ND)							
2. Exploring Creative Expression and Innovation (EI)							

- 3. Interpreting Culture (IC)
- 4. Conducting Formal and Quantitative Reasoning (FQ)
- 5. Understanding Societies and Institutions (SI)
- 6. Analyzing and Using Data (AD)
 - 7. Engaging Differences and Diversity (DD)
 - 8. Employing Ethical Reasoning (ER)
- 9. Writing Across Audiences and Genres
 - 9a. First-year writing (WF)
 - 9b. Advanced Writing in the Disciplines (WD)
- 9c. Writing-Intensive Courses in the Disciplines (WI)
 - 10. Integrating Knowledge and Skills Through Experience (EX)
 - 11. Demonstrating Thought and Action in a Capstone (EC)

Possible NUpath Additions We are considering the following items for integration into existing NUpath Attritues or as new attributes. We've included some examples of topics that would be covered within those themes rather than more well-defined Learning Goals as they are just in consideration for now and have yet to fully develop as potential NUpath attributes. Before putting in that level of effort, we would appreciate your feedback on whether these are worthwhile topics to pursue, including open-ended prompts to help refine them. Please indicate the priority level for each of these potential attributes, with 1 being a very low priority and 4 being a very high priority. We have also provided an opportunity for open-ended feedback on each. There is a more long-form opportunity for open-ended feedback at the end of this section as well for more detailed suggestions, criticism, or even suggesting different attributes.

1 be	icate Pr eing the 4 being	lowest	and	Please provide any comment on these potential additional or replacement paths
1	2	3	4	Answer 1

Sustainability / Climate - Carbon footprint, social responsibility, health and ecosystem consequences								
Finance - fiscial responsibility, informed consumer, financial literacy, investments, gaming / betting risks)								
News/Information Literacy - Critical Source Analysis, Propaganda, Social Media, Strategic information searching								
Technical Literacy - Vetting Technologies, Information Security, New Advancements - personal/professional settings, Communication via tech								
Civility / Conversations / Empathy - Opinion/Differences/Debate, Difficult Conversations, 'Healthy' Conflicts								
Health and Healthcare - informed/engaged consumer of healthcare, health literacy, healthcare 101 - private/'public'								
Adulting 101 - navigating life, critical decisions, understanding human resources topics								
General NUpath FeedbackPlease provide suggestions for other NUpath areas not su have on your above responses or thoughts	ggested	above.	Please	include	any exp	anded c	omment	_
						-		

Appendix J: Fall 2024 Faculty Survey Data

Table 11: Survey Opinions on the importance of Each NUpath Attribute by college – Summary of All Respondents (1 as low priority and 4 as high priority)

College		NCND	NCEI	NCIC	NCFQ	NCSI	NCAD	NCDD	NCER	NCW1	NCW3	NCWI	WAA D	NCEX	NCEC
	Average	2.8	3.0	3.2	3.1	3.2	3.2	3.2	3.4	3.1	3.1	3.1	2.8	3.2	3.1
	Count	286	289	291	287	287	288	290	286	282	282	284	281	284	279
COS	72	3.3	3.0	3.2	3.5	3.2	3.4	3.2	3.5	2.9	3.0	3.3	2.6	3.1	3.2
CSSH	108	2.9	3.0	3.6	3.0	3.5	3.0	3.4	3.5	3.3	3.2	3.2	3.1	3.1	2.9
COE	55	2.7	2.6	2.3	3.0	2.5	3.3	2.7	3.0	2.7	3.0	2.9	2.7	3.2	3.3
Bouvé	61	2.6	2.8	3.1	3.0	3.1	3.2	3.2	3.5	3.0	3.3	3.0	2.6	3.6	3.2
CAMD	69	3.1	3.5	3.6	2.7	3.4	2.9	3.4	3.4	3.1	2.9	3.1	2.8	3.3	3.4
Khoury	44	2.6	2.7	2.8	3.5	3.1	3.5	2.9	3.6	3.1	2.9	2.8	2.4	3.2	3.0
CPS	23	2.6	2.8	3.1	3.3	3.0	3.8	2.8	3.4	3.5	3.3	3.1	2.9	3.7	3.4
D'Amore-McKim	53	2.6	3.2	2.9	3.1	3.0	3.4	2.9	3.1	2.9	2.9	2.9	2.4	3.3	2.8
Law	12	2.5	3.0	2.0	2.5	2.0	2.5	3.0	3.0	3.0	2.5	3.0	3.0	3.0	2.5
Mills	19	2.7	3.6	3.6	2.7	3.4	2.9	3.8	3.5	3.6	3.3	3.3	2.9	3.1	2.9

Table 12: Survey Opinions on the importance of Each NUpath Attribute by College – Difference of Respondents with Experience Teaching that NUpath Attribute and of those without that experience

College		NCND	NCEI	NCIC	NCFQ	NCSI	NCAD	NCDD	NCER	NCW1	NCW3	NCWI	WAA D	NCEX	NCEC
	Average	0.45	-0.24	-0.40	-0.20	-0.28	-0.28	-0.36	-0.39	-0.41	-0.24	-0.11	0.02	-0.39	-0.02
	Count	58	71	91	60	85	76	75	69	33	51	102	40	70	72
COS		0.25	-0.03	0.44	-0.32	0.79	-0.22	0.05	0.46	-	0.57	0.18	0.92	0.00	0.41
CSSH		0.34	-0.30	-0.90	-0.28	-0.73	-0.39	-0.66	-0.51	-0.38	-0.44	-0.48	-0.19	-0.26	0.10
COE		0.54	0.44	-1.30	-0.36	-1.46	-0.58	-1.04	-0.37	-1.69	0.04	0.43	-1.67	-0.44	-0.13
Bouvé		0.22	-0.32	-0.35	-0.14	0.23	-0.20	-0.53	-0.66	-0.03	-0.29	0.60	0.35	-0.71	-0.45
CAMD		0.52	-0.24	-0.43	0.30	-0.09	0.30	-0.27	-0.57	-1.08	-0.59	0.23	-0.48	-0.58	-0.35
Khoury		-1.56	-	-	-0.80	-0.12	-0.64	0.56	-0.59	-	0.06	0.24	-	-0.74	0.00
CPS		0.42	-0.08	-0.59	-	-0.50	-1.25	-0.33	-0.42	-0.45	-0.27	-0.09	0.09	-0.73	-
D'Amore-McKim		0.58	-0.79	0.13	-0.13	-0.43	0.00	0.57	0.69	-1.93	-1.86	-0.63	-0.41	-0.71	-0.83
Law		-	-	-	-	-	-	-	-	-1.00	-	-1.00	-1.00	-	-
Mills		0.79	-1.64	-1.42	0.79	-0.63	-0.19	-1.04	-	-1.14	0.71	0.71	0.07	-	1.07

Appendix K: SustaiNUbility Presentation

Presentation provided to the committee by SustaiNUbility - the Student-led initiative aiming to create a sustainability-related NUpath



Agenda

Today, we will discuss:

- 1. Importance of climate education
- 2. Goal of NU Sustainability
- 3. Northeastern student opinions
- 4. Structure of SustaiNUbility
- 5. Proposed classes
- 6. Real-life example
- 7. Overview



The Importance of Climate Education

- Climate change is becoming increasingly destructive → students must learn how to combat it
- NU students are intelligent and innovative; arming them with this knowledge will create positive environmental ripples
 - Students can incorporate sustainable knowledge and practices into their careers after college
- This initiative will significantly enhance Northeastern's reputation as a leader in sustainability and innovation



NU Sustainability Goals

Northeastern has the following environmental missions & goals:



A sustainability-related NUpath would help Northeastern better achieve these.



What Do Our Students Think?

SustaiNUbility spent ~1 year from April 2023 to April 2024 gaining petition signatures from Northeastern students that support the idea of creating a sustainability program requirement.

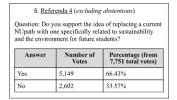
In total, we received 1,482 student signatures (pictured to the right).





What Do Our Students Think? (cont.)

Additionally, SustaiNUbility was featured as a referendum last year by the Student Government Association, with 66% of over 7,500 people supporting the idea (below).





Structuring a Sustainability NUpath

Logistics:

- Replace a current NUpath with one dedicated to sustainability
- To avoid conflict, a potential option is combining two current Nupaths:
 - My recommendation: "Interpreting Culture" and "Differences and Diversity"
 - The two share many courses and DD even includes "culture" in its short synopsis



Structuring a Sustainability NUpath (cont.)

Some may argue that "Engaging with the Natural and Designed World" is an environmentally-related NUpath that already exists.

Rebuttal:

 Although there are ENVR classes in this major, there are also classes related to other subjects that allow students to not take a sustainability related class – this is not our goal



What Classes?

- Our proposed NUpath would include:
 - a. Basic environmental classes
 - Classes that relate sustainability to other areas of study (ex: economics of sustainability)
 - Our goal is not to make people hate the idea of "having to go to their sustainability class"
 - Students deserve the opportunity to learn about sustainability in the realm of what area of study they are interested in



Example in Practice

- In September 2024, University of California, San Diego introduced their Jane Teranes Climate Change Education Requirement, which is a general education requirement focused on climate change
- This requirement is designed very similarly to some of the ideas already proposed by SustaiNUbility
 - "We wanted a distributed model where students could take climate courses within their own majors," Forman noted. "We don't want to disrupt students' time to degree. That was really important to the committee."
 - (https://ucsdguardian.org/2024/10/22/uc-san-diego-introduces-the-jane-teranes-climate-change-education-requirement/#:~:text=As%20of%20Sept.,be%20approved%20within%20UC%20system)

Example in Practice

- As of 2024, the University of Vermont has included a sustainability requirement in their core curriculum
- "Sustainability (SU) courses provide undergraduates with knowledge of the social, ecological, and economic dimensions of sustainability and the skills and values to address complex societal problems. Students are required to take 1 Sustainability course."
 (https://catalogue.uvm.edu/undergraduate/courses/ccc/)
- We can model our approach on their example, but further it using Northeastern's goals, missions, and the NUpath program



Overview

- Climate change is becoming increasingly problematic and Northeastern needs to take steps to become a leader in sustainability education
- From speaking with and polling students, there is a majority who agree with SustaiNUbility's initiative
- This has been done in other schools throughout the country, but not on a large scale, so Northeastern has a chance to elevate itself as a leader in sustainability.

