Indigenous Curricular and Cultural Exchange Gaps at BU

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Executive Summary

It is widely known that Indigenous people are responsible for protecting 80% of the world's remaining biodiversity, despite representing 6% of the global population (World Bank, 2023). This disproportionate representation is no different in the U.S., where Native Americans and Alaska Natives make up about 2% of the U.S. population yet find themselves on the frontlines of protecting many of our threatened ecosystems. A better understanding of how to support Indigenous study and members of academic communities is vital to curtail environmental threats. It is through direct attention that our current and future leaders and members of society are able to develop a stronger understanding of traditional ecological knowledge, concepts, and connections to the bioregions, cultures, and histories of the places they inhabit. Building these connections, in part, requires higher education institutions to have adequate courses and safe spaces of cultural practice that explore Indigenous knowledge, cosmologies, histories, and cultures.

To better understand this phenomenon, we conducted research on the gaps in the Indigenous curriculum, activities, spaces, and community at Boston University (BU). As part of this research process, we conducted a literature review and an analysis of peer institutions that have done work or created programs related to the above. In addition, we interviewed members of the local Indigenous community and surveyed students, faculty, staff members in order to better understand how BU can address this area. Through this, we identified specific action items, such as direct support of student initiatives and awareness campaigns, in this final report that articulate what BU can do to advance this topic in the university's curriculum, activities, and spaces.

While there have been course offerings and administrative programming exploring Native American themes at Boston University, institutional support for Native American curricular development and cultivation of cultural spaces of learning are lacking in comparison when considering peer and other institutions in the greater Boston area, such as Northeastern, Tufts, Lesley University, Harvard and MIT. This may, in part, be due to the significant decline in Native American / Alaska Native student enrollment and the lack of representation of relevant faculty and staff members employed at BU.

Preface

Our planet is teetering on the edge of ecological breakdown. As a country and as an institution, with new leadership on the horizon, we need to collectively reckon with how we arrived at this edge. Despite the tremendous strides the University is making to enhance the resiliency and adaptability of the infrastructures that power this institution, we are failing to teach our current and future leaders how to relate to all forms of kin in a capacity that cultivates sensibilities that heals, rather than harms the places we inhabit. How can universities help craft the ecological stewards of tomorrow when our current methods of educating our young leaders perpetuate the legacies of our colonial past? So many answers to this question reside in indigenous ways of knowing and relating, as the authors of this work argue.

The authors keenly note that this body of work "aims to initiate dialogue and spark an iterative process of learning, growth and action on this issue over time." This report represents a key first step in surveying literature, people, and institutions from a sample of peer institutions, and is intended to "open the book" on this topic, not to close it. While the results of this study make unambiguously clear that BU is far behind peer institutions in promoting Indigenous scholarship, we hope this gap will be seen more as an opportunity for growth than an institutional failure. To start with, this study sparks further interest in how widely the results reported here compare to roughly six thousand colleges and universities in the US educating tens of millions of students. The opportunities for further learning informing the development of Indigenous scholarship at BU are as immense as they are stimulating. As advisors to this research, we fully agree with the recommendation of the student team that this document be considered an open and living document, to be employed, cultivated and grown to go hand in hand with development of programs at BU for Indigenous scholarship.

An indication of BU's historical lack of investment in Indigenous studies is that neither of this project's advisors nor student team members identify as Indigenous. While ideally this research would be led by a team of Indigenous scholars on campus informed by authoritative knowledge and perspectives, demands on Indigenous scholars are high. We humbly offer this report as both a gift of labor and allyship, and a request to continue to learn in allyship. BU has an opportunity to build programs and spaces centered on Indigenous knowledge that, rather than siloing this knowledge, benefits the work across departments, centers, colleges and schools. These benefits should not be extractive, but received as a gift with due acknowledgment, recognition, and reciprocal support. Indigenous knowledge has been intentionally ignored and erased for centuries rather than uplifted; or extracted and exploited rather than shared. As the climate crisis intensifies, it is clear that "nature-based solutions" to climate are among our most powerful tools to adapt to and mitigate climate change. Yet among those who best know those solutions, and have known

them for centuries, are the very people who have historically lived in these lands, including the very land and former waters that BU occupies. By becoming more grounded in the unique geography we share at BU, we may not only improve BU, but be better able to look outward from our institutional home, to better appreciate the diversity of Indigenous peoples and lands around the country, continent, and world, and world-wide climate solutions befitting the scope of a "university".

In an exciting development as this project was being formulated, in fall, 2023, BU launched an Indigenous Studies Working Group (ISWG). In many ways, this initiative foreshadows just the type of program that this research hopes to promote, and the ISWG graciously helped promote this study in recruiting survey volunteers and making introductions for expert interviews. We thank the members of the ISWG and offer this research as a contribution to the developing knowledge base of the ISWG as it grows moving forward.

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Acknowledgments

We, the team behind this project, want to begin this report by acknowledging that we are in Boston, Massachusetts at Boston University, the ancestral and unceded territory of The Wampanoag and The Massachusett People. This statement is one small step in acknowledging the history that brought us to reside on the land. Additionally, Boston University acknowledges that Boston is still home to the Mashpee Wampanoag and Wampanoag Tribe of Gay Head (Aquinnah). The Charles River Campus stands on land that filled in what was once part of the tidal Charles River. This river was central to the lives of many Indigenous tribes throughout the region, and known as the Quinobequin by the Pawtucket people. Colonialism not only displaced these native peoples but altered the river landscape through damming and construction. This legacy continued on for many decades, providing BU with the land that the Charles River Campus now occupies.

Additionally, this report is intended to be a living document. This means that we understand that our results are not finite or absolute. We additionally see that there is much work that remains to be done in understanding the breadth and depth of Indigenous offerings in higher-education institutions in the US, and many directions this report could grow into. As such, we see this report as only a starting point; we aspire to incorporate more universities, interviews, and survey results, and to have others do the same and add to our contributions. This implies that we also intend for this report to be accessible to a wide variety of stakeholders.

Introduction

Indigenous people occupy 20% of the land around the world. Despite this relatively small percentage, this land contains 80% of the Earth's remaining biodiversity (International Institute for Sustainable Development, 2022). As such, Indigenous people worldwide remain the most effective environmental stewards and are thus at the forefront of resisting the widespread environmental crises we are seeing around the world. Conserving biodiversity is crucial for sustainable land management, and with this comes the importance of conserving Indigenous knowledge (Gadgil, Berkes, & Folke 1993). A review from Dawson et al. (2021) investigated 169 studies on conservation outcomes and found that most studies that presented positive outcomes for both conservation and well-being of local people had Indigenous peoples and local communities at the center of their methods and legislation. Traditional Ecological Knowledge (TEK) is a phrase commonly used to describe the environmental knowledge of local Indigenous people and is based on historical observation of ecological relationships. This deeply rooted knowledge is vital to better understanding our environment and how to best preserve it, yet this knowledge is under threat of cultural loss.

In the US, 6.6 million people identify as Native American or Alaska Native, which accounts for just 2% of the population (IWGIA, 2016). Additionally, the high poverty rate (27%) and lack of cultural recognition have made it difficult for Native Americans to stay involved in conservation efforts around the country. A study by Wilder et al. (2016) suggested that the declining use of language and loss of culture among Indigenous people could lead to the loss of Indigenous knowledge, as TEK is often passed down from generation to generation. As such, the importance of preserving Native American cultures is important not only for these Indigenous peoples but also for the ecological future of the US. Fortunately, there is an increased movement in the US to allow more stewardship and biodiversity protection from Native American tribes, as natural land is increasingly being returned to Native Americans to protect using TEK. This aligns with President Biden's 30x30 Plan, which is to protect 30% of US land by 2030 (Yale, 2021). Despite these promising efforts, there is still much to be done to foster an understanding of Indigenous culture and legitimize TEK as a knowledge system. To do so, we look to institutions of higher education which are frequently the centers of scientific inquiry and innovation, while they themselves are often located on land once occupied and managed and still inhabited by Indigenous people.

Throughout the US, institutes of higher education (IHEs), such as colleges and universities, have frequently been founded on the dispossession of Indigenous land, and consistently invalidate TEK. Often due to the colonialist roots of IHEs perpetuating Western scientific knowledge as superior, and thus dominating IHE land management practices, Indigenous knowledge is often viewed as 'traditional,' and thus outdated and irrelevant. Neither is this contained to specific

institutions, as O'Brien and Mudaliar (2022) looked at land owned by 12 different IHEs, and found only one management plan that even began to describe how TEK might be included. IHEs are substantial land owners across the country, and failing to include Indigenous knowledge in the management of this land limits successful ecological conservation. Despite many IHEs framing themselves to be future thinking, they continue to perpetuate colonialism through the continued hindrance of Indigenous practices on traditional lands.

In addition, Traditional Ecological Knowledge is frequently excluded from IHE curricula because it is not thought to fall in line with the 'universal truths' of Western science (Reis and Ng-A-Fook 2010). Not only is this inaccurate, as previously proven through the success of using TEK to preserve biodiversity, but it further excludes Indigenous culture from IHEs. Alexiades et al. (2021) documented the effects of implementing the i-NATURE (Indigenous iNtegration of Aquatic Sciences and Traditional Ecological Knowledge for Undergraduate Culturally Responsive Education), which places more Indigenous scientific knowledge and practices at the heart of the curriculum. They found that implementation of the i-NATURE program led to higher retention rates in students, higher GPA, and a higher interest in Indigenous students pursuing graduate school for a STEM degree (Alexiades et al.). Additionally, Fish and Syed (2018) found that universities were more desirable to Native American students when they had a large native student population, were committed to Native American education, and provided mentoring programs to connect students with Native American instructors and staff to help them navigate academic, social, and spiritual challenges. As such, IHEs have a responsibility to include more Indigenous curricula, provide better support to their Indigenous students and faculty, and legitimize TEK within their teaching of science and their own land management practices.

Yet the legacy of colonization is also visible in student demographics at these institutions, which can also present barriers to Native American education. This, in a sense, preserves the cycle of limited educational opportunities for these groups. Native Americans have the lowest college enrollment rates among 18-24-year-olds, making up only 0.9% of undergraduate students nationwide (Fish and Syed 2018). Additionally, Native American students also have the lowest graduation rates, caused largely by the cultural oppression and social alienation faced on campuses. Students with strong cultural values, traditions, and family ties may have trouble transitioning to a college or university where they are unable to engage with this side of their identity. Additionally, many students may feel alienated due to racism and stereotyping on campus, especially due to the relatively low numbers of peers at an institution who also identify as Native American (Fish and Syed 2018). As such, IHEs have a responsibility to create more inclusive spaces, and Indigenous curricula, and recognize the validity of Indigenous knowledge, especially in their science curricula.

Current State of Indigenous Education at Boston University and Comparison

Boston University (BU) offers a selection of courses and events related to Native American and Indigenous Studies (NAIS), such as "Native American and Indigenous Studies" and "Indigenous Peoples of the Americas." However, BU's initiatives in this area, including sporadic symposiums and exhibitions like "Natural Wanderment: Stewardship. Sovereignty. Sacredness" (2024) and "Indigenous Voices in the Americas Series" (2022) both by the Boston University Arts Initiative, are somewhat fragmented and do not appear to be supported by a comprehensive academic program or dedicated student support structures typically found in more robust programs. Most recently, an Indigenous Studies Working Group was founded in Fall 2023 with the goal to engage community members through scholarship in Indigenous Studies by hosting lunch seminars (2024), film screenings, reading groups and other events. To place BU's current Indigenous initiatives and courses into perspective, we conducted a comparative analysis of 21 IHEs. Universities were chosen due to their location in the greater Boston area, or by their status as a peer or aspirational institution as determined by BU's Board of Trustees; we also acknowledge that there may be outstanding Indigenous programs in universities or tribal colleges that we did not consider here, mostly due to our time constraints. As aligned with the earlier stated goal of this report to be a living document, we aspire to incorporate more universities, interviews, and survey results. For each institution we surveyed, we used online resources to find information about their academic programs and course offerings related to indigeneity, student demographics, faculty and staff demographics and expertise, and cultural spaces and resources on campus. Using this information, we could determine where BU stands in comparison to other institutions, what other universities do well, and how we can use these successes to influence our initiative. The institutions that we evaluated were Boston College, Boston University, and Brown University. Additionally, there's Case Western Reserve University, Columbia University, and Emerson College. Emory University, Harvard University, and Johns Hopkins University also stand out. Joining them are Lesley University, the Massachusetts Institute of Technology (MIT), and New York University (NYU).

Through our comparative analysis of 21 institutions, we found several institutions that support and demonstrate a clear commitment to integrating Indigenous knowledge and history into their curriculum, coupled with supporting the Indigenous life on campus. In this report, we have chosen four to discuss in detail below.

The Harvard University Native American Program (HUNAP) is a successful program that effectively incorporates Indigenous research, curricula, and student life. There is a wide range of faculty and staff involved in teaching HUNAP courses or conducting research related to Native American and Indigenous studies. The HUNAP curriculum is currently offering 18 related courses in spring 2024 but has offered as many as 36 courses in a given semester. These courses are

organized into three categories: those taught by HUNAP faculty, those taught by general faculty but which focus on Indigenous topics, and those in which parts of the course cover Indigenous topics. This categorization, as well as the wide variety of course topics offered, gives students of all backgrounds and interests the opportunity to take Indigenous-focused courses. Additionally, HUNAP provides funding and support for Native American research and related conference attendance of students and faculty, in turn supporting the importance of research in this field. Outside of HUNAP, Harvard University also features a wide range of Indigenous student groups, such as Future Indigenous Educators Resisting Colonial Education and the Indigenous Women's Group, just to name a few. Despite Harvard's relatively low proportion of Indigenous students, these groups help to provide a welcoming and inclusive campus environment, which may help to promote the success of their Indigenous student population.

New York University has also implemented a successful Indigenous curriculum and is currently working to establish its own Center for Indigenous Studies. NYU currently offers a minor in Native American and Indigenous Studies, which includes over 50 related courses that can be used towards the minor. The courses range from anthropology and history to public policy to social and cultural analysis, thus giving students the opportunity to engage in Indigenous studies in a wide range of contexts. Additionally, one of the goals of NYU's Center for Indigenous Studies is to establish a Native American and Indigenous Studies major as well. The university hopes to recruit more faculty into this field and to become an educational center in the field of Indigenous Studies. While the success of this program remains to be seen, the efforts being put forth by NYU are promising, especially considering the already successful Indigenous curriculum at the school. Despite the fact that NYU has a very low Indigenous student population, they also offer a successful Native American and Indigenous Student Group to support their students, which will hopefully grow in influence following the creation of the Center for Indigenous Studies.

The Cornell University American Indian and Indigenous Studies Program (AIISP) represents a comprehensive commitment to the education and support of Indigenous students and scholarship. Offering a robust curriculum, the AIISP includes an array of courses archived and currently available that engage with the histories, cultures, and issues pertinent to Indigenous communities. Although there is no major in American Indian and Indigenous Studies, a minor is available, underpinned by significant resources such as the prestigious Newberry Consortium in American Indian Studies membership. This membership enables students to access fellowships, symposia, and unique research opportunities in Indigenous studies. Cornell's faculty, including both Indigenous and non-Indigenous professors like Troy Richardson (Saponi, Ska:rù:re'/Tuscarora) and Jon Parmenter, are actively involved in teaching and research that supports the program's goals. The university also provides cultural spaces and supports more than

400 Indigenous students through initiatives like the Akwe:kon residential program and various student organizations. These efforts reflect Cornell's long-standing ties with North American Indigenous Nations and underline its role as a center for Indigenous academic pursuit and community engagement.

Lastly, Tufts University also stood out. The Native American and Indigenous Studies (NAIS) minor, housed within the Department of Studies in Race, Colonialism, and Diaspora (RCD), offers a focused curriculum on Native American and Indigenous histories, cultures, and politics. This program places a strong emphasis on comparative settler colonialism, Native American politics, global critical Indigenous studies, and methodologies. Students in the NAIS minor are required to complete five courses, including those with regional focuses and a capstone project that often involves internships or activist research engaging with local tribal communities. Further, Tufts has seen an increase in Indigenous student enrollment, with the undergraduate class of 2026 including 41 students identifying as having Native or Indigenous heritage. This growing community is supported by the recently established Indigenous Center, which is part of Tufts' Division of Student Diversity and Inclusion. The center provides a dedicated space for supporting Indigenous students, offering academic and personal support through various cultural and community-building events. Faculty specialization in Indigenous studies includes professors such as Lilian Mengesha and Diego Luis, although specific details on Indigenous faculty were limited in the provided sources. The program also benefits from courses such as "North American Archaeology," which explores pre-colonial Indigenous histories and cultures, thereby enriching the academic offerings related to Indigenous studies at Tufts.

Note, that while these schools appeared to be doing well on paper, the actual experiences of students and faculty at these institutions may vary. While we were careful not to insist on people's time — understanding that there are often many demands on the time of underrepresented faculty, staff, and students on campuses — we were not able to interview or garner a survey response from anyone currently associated with these institutions. This does not excuse our limitation in interview data but it does help explain it.

Online Survey Results

To gauge the level at which individuals affiliated with higher education institutions were familiar with Indigenous courses and other offerings on their campus, we developed and administered an anonymous Qualtrics survey via the Internet. Survey participants were recruited by "cold" emailing program coordinators on campus (both BU's campus and other schools), professors who were affiliated with or taught Indigenous studies classes, and students.

We received 79 unique responses, with 11 schools represented. Boston University (BU) was the most represented school in our sample (87%) because the research team knew most people at BU and was able to reach out to them directly. While not a definitive account of the scope of the number of offerings on any campus, we feel that we were successful in gauging the range of laypeople's perspectives regarding Indigenous offerings on campus, especially at Boston University. Additionally, the survey asked whether respondents identified as Native or Indigenous and asked them to specify, if yes, which tribe they belonged to. Other than this and the institution people were affiliated with, the survey was anonymous.

Here is the summary of findings from the survey:

- 1. 69/79 individuals surveyed were affiliated with BU. This included 10 staff, 9 faculty, 17 graduate students, and 33 undergraduate students. Out of the 79 responses, 5 self-identified as Native or Indigenous (6%)
 - As noted in the introduction, Native Americans and Alaska Natives make up about 2% of the U.S. population. While our survey percentage was much higher than the national average, it does not encapsulate the diversity of either Indigenous populations within the US or of college populations as a whole. To err on the side of caution, our findings are conservative in the sense that they may overstate the level of knowledge awareness and support for Indigenous programs.
- 2. The majority of respondents (43%) were **not** aware of courses and programs offered at their schools, closely followed by 39% who were aware of courses and other programs. 17.7% were unsure.
- 3. 52% of respondents indicated they believed it is 'extremely important' for higher education institutions to incorporate Indigenous knowledge into their curricula. Only 30% believed that it was 'slightly important.'
- 4. Most individuals indicated that they were 'somewhat familiar' (38%) with Indigenous cultures and knowledge before attending their university. Many indicated they were not familiar (22%) with Indigenous cultures and knowledge and 29% indicated that they were moderately familiar. The majority of those who indicated that they were 'extremely familiar' or 'very familiar' self-identified Indigenous individuals.
- 5. Nearly half of the respondents (47%) strongly disagreed with the statement that "Indigenous knowledge and perspectives are adequately represented in our curriculum," while 30% somewhat disagreed. No respondent "strongly agreed" with the statement.

- However, 58% of respondents agreed that they would be interested in participating in future programs or courses involving direct engagement with Indigenous communities.
- Furthermore, 49% (56/79) of respondents indicated that Indigenous knowledge is integrated **not well at all** into their school curriculum, with 21% of respondents indicating 'slightly well.'
- 6. Lastly, survey respondents were asked to rank what they believed the barrier to incorporating more Indigenous knowledge and history was.
 - It was the perception of 30% of respondents, the plurality, that a 'lack of qualified faculty' or 'faculty hiring' was the largest barrier to incorporating more Indigenous knowledge and history.
 - This was followed by a lack of community engagement between individual institutions and local tribes or Indigenous groups, at 29%
 - Curriculum development 26% was identified as the third barrier.
 - Lack of student support was typically ranked fourth and no one identified a 'lack of research opportunities as being the *primary* barrier.

Limitations

This study has several important limitations to acknowledge. First, our survey sample, while providing valuable insights, may not fully represent the perspectives of the entire Boston University community or Indigenous populations more broadly. With 87% of respondents affiliated with BU, the results could be biased toward the awareness and experiences specific to this institution. Additionally, while our survey percentage of Indigenous respondents (6%) was higher than the national average of 2%, the relatively small number means perspectives from this group should be interpreted cautiously as not necessarily reflecting the diversity of Indigenous communities across the United States.

Secondly, our comparative analysis across universities was limited to examining publicly available online information about Indigenous programs, course offerings, demographics, etc. We did not have the capacity within this project's scope to conduct in-depth interviews or make site visits to validate and contextualize the information presented by each institution's websites and reports. As such, our comparative findings provide an overview but may overlook nuances in how Indigenous initiatives are operationalized on different campuses.

Furthermore, our interview data, while rich in insights from the individuals we spoke with, represents only a handful of perspectives from Indigenous higher education professionals. Given the diversity of Indigenous cultures, tribes, and experiences, the interviews cannot be considered

fully representative. We aimed to incorporate a range of viewpoints but acknowledge that our limited interview sample means other important voices and perspectives were likely missed.

Time constraints also restricted the depth of our literature review, limiting our ability to fully contextualize the findings within the broader scholarly research on this topic. While we synthesized key themes and concepts from the literature, a more comprehensive review could yield additional insights to consider.

Finally, it is important to reiterate, as noted in the report itself, that our analysis and recommendations are not meant to be definitive or absolute. As a living document, this report aims to initiate dialogue and spark an iterative process of learning, growth, and action on this issue over time. We readily acknowledge that our work represents an initial step requiring continuous input, reflection, and adaptation as Boston University's relationship with Indigenous communities evolves. Despite these limitations, we believe this report provides a critical snapshot highlighting gaps and opportunities for Boston University to enhance Indigenous curricular offerings and cultural engagement. The findings and recommendations serve as a foundation for further inquiry, collaboration, and positive institutional change in this area.

Survey Analysis and Recommendations

The survey and interviews clearly highlight significant gaps in the representation and integration of Indigenous knowledge within higher education curricula. These findings not only illuminate the challenges but also present a roadmap for institutions aiming to foster a more inclusive and comprehensive educational environment.

- 1. Enhanced Faculty Recruitment and Development: One of the largest barriers identified was the lack of faculty who specialize in Indigenous studies. Addressing this requires a proactive approach to recruitment and faculty development:
 - a. Targeted Recruitment/Retention: Institutions should actively seek candidates who have a background in Indigenous studies for both new and existing positions. This might include collaborating with organizations that focus on Indigenous scholarship or using recruitment channels that reach Indigenous communities.
 - b. Professional Development: Develop ongoing training and professional development opportunities for all faculty and staff to enhance their understanding of Indigenous knowledge and methodologies. This could include workshops, guest lectures, and exchange programs with Indigenous institutions. In doing so, faculty can also learn how to better integrate Indigeneity and TEK into their course designs.

- c. Incentive programs: Establish fellowship and grant programs specifically designed to support research and teaching in Indigenous studies. These incentives can attract and retain top talent in the field and encourage other scholars to engage with Indigenous topics. These sources of funding could also be used to support masters or doctoral students wishing to pursue research related to Indigenous studies for their theses.
- **2.** Curriculum Development and Integration: To ensure that Indigenous perspectives are adequately represented, curriculum overhaul is essential:
 - a. Curriculum Audit and Redesign: Conduct a comprehensive review of the current curricula across disciplines to identify and address gaps where Indigenous knowledge should be integrated. This should involve auditing research programs and the syllabi of faculty, as well as doing a faculty survey that could identify how Indigenous knowledge is currently being incorporated, and views on its relevance in a particular course. This audit should involve input from Indigenous scholars and communities to ensure authenticity and relevance.
 - **b.** New Program Development: Beyond integrating into existing courses, there's a substantial opportunity to develop standalone programs in Indigenous studies. This could range from certificates to minors and majors, providing a structured path for students to engage deeply with the topics. This would also necessitate an expansion of Indigenous courses to fulfill requirements or better integration of Indigenous topics in current course offerings.
 - **c. Experiential Learning:** Incorporate experiential and place-based learning opportunities that allow students to engage directly with Indigenous communities and landscapes. This approach not only enriches learning but also helps bridge the gap between academic theory and real-world application.
- 3. **Strengthening Community Ties:** Forging stronger connections with Indigenous communities can provide mutual benefits for educational institutions and the communities themselves. However, this must be done with respect for the time and wisdom of Indigenous communities. This is not a system of pure 'teaching,' but a *relationship* which must be fostered:
 - a. **Partnership agreements:** Establish formal partnerships with Indigenous communities to collaborate on curriculum development, research projects, and

community service initiatives. These partnerships should be based on principles of respect, reciprocity, and mutual benefit.

- i. Specifically, create a 'liaison' role for an individual (or two) to work between the institution and local communities. As one staff member said in his interview: "Appointing a liaison can greatly facilitate communication, potentially preventing misunderstandings and addressing issues proactively. While it's beneficial if the liaison is Native or Indigenous, the key factor is having a designated point of contact... Without a centralized point of contact, departments might operate independently, which can lead to disjointed efforts and potential problems."
- ii. Use these partnerships to establish more sustainable land management practices on campus which prioritize traditional ecological knowledge. Indigenous partners could work with current sustainability groups and initiatives on campus to further these partnerships and convey the ecological importance of Indigenous land use practices. This could also help to legitimize land acknowledgment statements, and demonstrate the institution's commitment to ecological sustainability.
- b. Community-Led Initiatives: Host seminars, workshops, and events that are led by Indigenous leaders and scholars. These initiatives can provide authentic perspectives and learning experiences not only for students but for the faculty and broader community. To be most effective, these events should be well publicized and organization and participation of these events should involve Indigenous student groups.
- c. Supporting Student Engagement: Enhancing support for students, both Indigenous and non-Indigenous, is crucial for fostering a supportive and inclusive academic environment. Along with these efforts, Indigenous student recruitment and prospective student outreach could also be used to increase the Indigenous student body and create a more inclusive environment for Indigenous students.
- d. Dedicated Spaces and Clubs: Create dedicated spaces on campus that celebrate and center around Indigenous cultures, such as Indigenous cultural centers or lounges. Indigenous students can benefit from feeling more at-home and welcomed on campus through the support of their peers and the institution. Support the formation and activities of clubs and organizations that focus on Indigenous issues, providing them with resources and visibility on campus.

- **e. Mentorship programs:** Develop mentorship programs that connect students with Indigenous scholars and professionals. These programs can help support students academically and professionally, providing guidance, inspiration, and opportunities for networking.
- f. Awareness campaigns: Implement ongoing campaigns to raise awareness about Indigenous cultures, histories, and contemporary issues. These could include public lectures, art exhibits, and cultural festivals, which can help educate the campus community and promote inclusiveness. Creating a welcoming campus might mean renaming buildings or other spaces that promote harm, such as 'Miles Standish hall' on Boston University's campus.

By implementing these strategies, higher education institutions can not only improve their educational offerings but also play a pivotal role in preserving and promoting Indigenous knowledge. This commitment to integration will contribute significantly to the academic success of Indigenous students and the cultural enrichment of the entire educational community.

Literature Review Data

University	Academic Programs & Course Offerings	Student Demographics	Faculty and Staff	Cultural Spaces and Resources
Boston College	6 related courses	76 students American Indian or Alaska Native (0.7%)	4 faculty with expertise 7 American Indian or Alaskan Native	Intercultural Center (BAIC) Student Organizations
Boston University	4 related courses	0.0415% of students American Indian or Alaska Native	Some faculty have interests that align with Indigenous studies	NALSA Attempts at broad-scale outreach
Brown University	Critical Native American and Indigenous Studies Concentration (NAIS) 15 courses	50 students American Indian or Alaska Native (0.465%)	Staff and faculty involved in NAIS	Student organizations, such as Natives@Brown
Case Western Reserve University	Several courses related to Indigenous studies (directly and indirectly)	0.741% of students American Indian or Alaska Native	Some faculty with interests that align with Indigenous studies	Office of Multicultural Affairs promotes inclusivity, other resources and organizations for Indigenous students offered
Columbia University	Several related courses across various departments Offers intensive academic programs related to Indigenous studies	58 students American Indian or Alaska Native (0.15%)	28 faculty members identify as American Indian or Alaska Native Some faculty with interests that align with Indigenous studies	Indigehouse: dorm for Indigenous students

University	Academic Programs & Course Offerings	Student Demographics	Faculty and Staff	Cultural Spaces and Resources
Cornell University	Minor in American Indian and Indigenous Studies Wide range of related courses	Over 400 students American Indian or Alaska Native (1.82%)	Indigenous faculty and faculty interested in NAIS enrich the academic programs	Community building activities and resources for Indigenous students Akwe:kon - Indigenous resident house that offers community engagement opportunities
Emerson College	6 related courses Minor in Global and Postcolonial Studies	No information found	3 Indigenous faculty	Social justice collaborative offers support for Indigenous members of Emerson's community
Emory University	6 related courses	0.0118% of students American Indian or Alaska Native	Some faculty have interests that align with Indigenous studies	Native American and Indigenous Students Initiative (NAISI)
George Washington University	Limited course offerings related to Indigenous studies	0.1% of undergraduate students American Indian or Alaska Native	No information found	AT&T Center for Indigenous Politics and Policy Multicultural Student Services Center

University	Academic Programs & Course Offerings	Student Demographics	Faculty and Staff	Cultural Spaces and Resources
Harvard University	Harvard University Native American Program (HUNAP) Wide range of related courses (36 taught in given semester)	549 students American Indian or Alaska Native (0.175%)	0.1% faculty American Indian or Alaska Native 14 faculty members involved in HUNAP	Wide range of Native American student organizations
Johns Hopkins University	7 related courses	0.1% of students American Indian or Alaska Native	4 faculty members with interests that align with Indigenous studies	Some Indigenous student organizations
Lesley University	Diverse range of related courses	14 students American Indian or Alaska Native (0.35%)	Some faculty have interests that align with Indigenous studies	No information found
Massachusetts Institute of Technology	Masters program in Linguistics for Indigenous languages 2 related courses	1% of students American Indian or Alaska Native	Faculty position in Native American studies	Native American Student Association and American Indian Science and Engineering Society
Northeastern University	2 related courses	0.13% of students American Indian or Alaska Native	0.5% of faculty and staff American Indian or Alaska Native 3 faculty members have interests that align with Indigenous studies	Native and Indigenous Affinity group

University	Academic Programs & Course Offerings	Student Demographics	Faculty and Staff	Cultural Spaces and Resources
University of Pennsylvania	Minor in Native American and Indigenous Studies (NAIS) 4 related courses offered in spring 2024	10 students American Indian or Alaska Native (0.1%)	0.1% of faculty American Indian or Alaska Native Some faculty have interests that align with Indigenous studies or Penn Museum curation	Native at Penn (student organization)
University of Rochester	4 related courses	Class of 2026: Less than 1% of students American Indian or Alaska Native	1 professor who seems to specialize in Indigenous studies	Native American and Indigenous Student Association
University of Southern California	Minor in Native American Studies 8 related courses	82 students American Indian or Alaska Native (0.165%)	7 indigenous faculty members Some faculty have interests that align with Indigenous studies	Native American and Pasifika Lounge - student space Native American Student Assembly

Survey Data

What is your role at the institution? - Selected Choice		Are you aware of any courses or programs at your institution that focus on Indigenous knowledge, religions, histories, and cultures?	
Staff	0.2025316456	Yes	39.24050633
Faculty	0.1265822785	No	43.03797468
Graduate Student	0.2278481013	Not Sure	17.72151899
Undergraduate	0.4430379747		
Indigenous identifying	6.329113924		
How would you describe your familiarity with Indigenous cultures and knowledge prior to attending your current institution?		To what extent do you agree with the following statement: "Indigenous knowledge and perspectives are adequately represented in our curriculum."	
Extremely familiar	5.063291139	Strongly disagree	0.4683544304
Very familiar	5.063291139	Somewhat disagree	0.3164556962
Moderately familiar	29.11392405	Neither agree nor disagree	0.1012658228
Somewhat familiar	37.97468354	Somewhat agree	0.07594936709
Not familiar at all	22.78481013	Strongly agree	0

How important do you believe it is for higher education institutions to incorporate Indigenous knowledge into their curricula?			
Extremely import	41	0.5189873418	
Very important	24	0.3037974684	
Slightly importan	4		
Moderately impo	6		
No Response	4		
	79		
In your opinion, what is the primary benefit of integrating Indigenous knowledge into higher education curricula? - Selected Choice		BU	Non-BU
Enhancing cultur	al awareness and	17	1
Promoting sustainability and envir		8	0
Supporting indigenous communities		31	4
Enriching academic research and		6	2
Other (please sp	ecify)	3	3
No response		4	0

What barriers, if any, do you perceive exist to incorporating Indigenous knowledge and perspectives into the curriculum?	BU	Non-BU
Lack of administrative support	21	2
Lack of qualified faculty	20	4
Not sure	6	2
Insufficient student interest	6	0
No response	7	1
Limited resources or funding	5	1
Other	4	
Total	69	10

Please rank the following areas in order of priority where you believe your institution should focus its efforts to better integrate indigenous knowledge:	
Faculty Hiring	24
Community Engagement	23
Curriculum dev	21
Student Support	3
Research	0

Sample Interviews

Interviewees granted permission to be identified and published here after reviewing an edited transcript.

1. Matthew Makomenaw (MM):

I've been involved in Native higher education for over 20 years, working in a variety of roles across multiple institutions. My experience spans teaching and administrative positions at tribal colleges, community colleges, and larger universities like the University of Utah, which comprises 12 schools. I've also worked in private educational institutions. My roles have not been limited to Native American studies; I've also taught general higher education courses and have been deeply involved in college access initiatives. Throughout my career, I've worked both in Native American Cultural Centers and in traditional classroom settings. So, my insights draw from a broad spectrum of experiences in the educational sector.

Integrating Native and Indigenous knowledge into higher education and general education is critically important. We need to consider how to incorporate this knowledge effectively, determining what it looks like and who is qualified to share it. This issue is complex and unique, often associated traditionally with cultural and historical studies. However, there is much more to explore beyond these areas. Native and Indigenous people contribute significantly to fields such as science, art, and the humanities, which go beyond merely historical contexts.

Most curriculums tend to limit Indigenous content to historical perspectives, but it's vital to recognize its contemporary relevance as well. It's not just about history or culture; Indigenous thought encompasses a broader spectrum including mathematics, research methodologies, and relational understanding. Moving forward, we need to normalize the recognition that Indigenous thought extends beyond stereotypes and encompasses all fields of study. There has been progress, but there is still much work to be done in this area.

Elizabeth Kostina:

How have you observed the acceptance and integration of Indigenous knowledge and cultures in higher education curricula and spaces change from the beginning of your career to now?

MM:

As I mentioned earlier, there has traditionally been a strong focus on history and culture within Indigenous studies, but this is expanding. Nowadays, if you ask around, more people are aware of

Indigenous professionals in fields like environmental science, engineering, or educational leadership. The presence of Indigenous thought is growing beyond the expected areas of history, culture, or specialized centers. It's equally important to see Indigenous representation in roles such as financial aid and admissions. We are witnessing progress, with more Indigenous voices being heard in diverse positions across academia. This includes everything from land acknowledgments at conferences to Indigenous professionals influencing areas beyond specific Native roles, which helps bring diverse Indigenous perspectives into broader educational contexts. There's still work to be done, but significant advancements have been made since I started in this field.

EK:

At your current institution, how well do you think Indigenous spaces, clubs, or organizations are supported? Additionally, how are Indigenous knowledges, cultures, histories, and contemporary perspectives integrated into classes or course offerings?

MM:

That's a challenging question. It's difficult to comprehensively assess how Indigenous topics are integrated across all courses, as one might not see everything that's happening in each class. For example, a class might officially fall under Native studies, or it might incorporate Indigenous content in a less obvious way, like within an engineering course. So, the integration might not always be evident without a thorough investigation.

Initially, our institution had only one Native professor, and while other faculty members may have included Indigenous content in their courses, it wasn't as recognized. Now, we have grown to include more Native faculty and a variety of courses, including a language class specifically focused on Indigenous languages, and several lecturers, including myself, who incorporate Indigenous perspectives. The integration of these perspectives is improving, but it's a gradual process. We're not yet where we'd like to be, but the environment is becoming more inclusive and aware of the importance of integrating Indigenous knowledge.

EK:

Could you discuss the different types of Indigenous-focused organizations, such as clubs or spaces, that are available on campus? These spaces are not necessarily related to programming or courses, but rather the spaces the university creates and supports.

MM:

Most institutions I've been involved with provide student groups and dedicated spaces for Indigenous students. For example, some campuses have actual houses or centers, while others might offer floors or dedicated offices. One university progressed from having just a large office to an entire building, which is quite impressive. The level of support varies: some institutions might have more resources, funding, or access to external Indigenous communities in the city or on reservations. Support can be defined in many ways, but all the places I've worked have provided some form of support, although not always abundantly in every area.

The effectiveness of these spaces often comes down to the people involved. There's a real community feel, and those who are passionate about their work tend to create the most engaging and supportive environments.

EK:

Could you also speak about the best and not-so-great practices you've observed in partnerships between universities and native groups, especially in terms of curriculum development and other collaborations?

MM:

In my experience, effective collaborations between universities and native groups often involve direct engagement and mutual respect. Best practices include actively seeking input from native communities when developing curricula or other educational projects. This collaboration should be a partnership, not just an institution imposing its agenda. Conversely, less effective practices often fail to consider the needs and perspectives of the native communities, treating them more as resources than as partners. A successful partnership means engaging with native groups in a way that respects their knowledge and contributions, ensuring that both sides benefit and learn from the interaction.

Again, this is a context-specific question, so I'll answer in the most general way possible. It's crucial to establish a connection between universities and tribal leadership, especially in states with tribal reservations. This relationship can significantly impact the collaboration's effectiveness. However, not all university activities need to involve tribal collaboration, so it's important to find the right balance.

Appointing a liaison can greatly facilitate communication, potentially preventing misunderstandings and addressing issues proactively. While it's beneficial if the liaison is Native or Indigenous, the key factor is having a designated point of contact. Understanding and developing Memorandums of Understanding (MOUs) can also be helpful, although they can sometimes be vague. The most critical aspect is building a solid relationship and understanding the separate goals and values of each institution. Without a centralized point of contact, departments might operate independently, which can lead to disjointed efforts and potential problems.

EK:

Thank you for sharing that. Could you provide a specific example of effective communication that you've experienced or witnessed, either at your current institution or in any of your roles?

MM:

Certainly. It's essential to understand that not all activities involving Native communities require communication, but when it is necessary, it must be done thoughtfully. For instance, if a professor intends to partner with a Tribal Nation, particularly one that is distant, establishing clear communication channels is crucial. An example of effective communication is when seeking to collaborate on a grant. Before anything is written, it's important to discuss with the community what the project entails, what both parties stand to gain, and what the expectations are. A poor approach would be to secure funding without prior discussion and then inform the community about the project's objectives. Instead, engaging with the community beforehand to understand their needs and interests ensures a respectful and mutually beneficial collaboration.

EK:

Absolutely. I'm also curious about best practices for teachers not specialized in Native studies who wish to integrate Indigenous knowledge into their curriculum. For example, if a professor in engineering wants to include Indigenous perspectives, how should they proceed, especially if they lack direct connections to a local Native community?

MM:

In situations where a professor wants to integrate Indigenous knowledge but lacks direct community ties, it's important to approach inclusion thoughtfully and respectfully. The first step is to engage in thorough research and possibly consult with experts in Native studies or Indigenous scholars. They should seek resources that are respectful and authentic, and consider partnerships with Indigenous organizations that can provide guidance and insights. The goal is to ensure that

the integration of Indigenous perspectives is done in a way that is informed, respectful, and beneficial to all students, while also honoring the depth and diversity of Indigenous knowledge.

EK:

Can you elaborate on how individuals can effectively learn and share Indigenous knowledge and perspectives?

MM:

To truly engage with a topic, it's crucial to go beyond skimming a few articles; one must delve deeply into the subject matter. It's important to share what you know and acknowledge what you don't since presenting only one perspective as definitive overlooks the diversity of viewpoints among different communities. As someone native, I can share what I've learned and read, but I can't claim expertise on all aspects of Indigenous cultures and languages. This approach isn't just for academics; it applies universally. The goal is to share knowledge responsibly while remaining open to learning more from others.

People have varied perspectives on what constitutes an Indigenous curriculum, which can encompass language, culture, representation, and values. The interpretation of what it means to incorporate Indigenous elements into education varies widely. The key is to remain open, make continuous progress, and keep pushing the movement forward. It's also essential to envision future goals while not letting those aspirations overshadow current achievements. Celebrating progress and regularly reassessing our direction is crucial, as the ideal path might shift over time.

I share this as my viewpoint, recognizing that others may have differing opinions, which is entirely valid. From my experience, there has been significant movement and progress, though not always as fast as some might hope. The journey includes challenges, but the progress is evident and ongoing

EK:

Could you elaborate on the challenges you've encountered or seen in making progress within Indigenous education?

MM:

Certainly, there are numerous challenges. Understanding and overcoming misconceptions is a major hurdle. Even among Native and Indigenous communities, reaching a shared vision can be difficult. And it's certainly easier if you're at an institution where 80% of the students are from one

specific tribal nation. But if you're at an institution where five people represent one tribe, it's a lot more complicated. Diversity in perspectives, especially in institutions with varied tribal representations, complicates consensus—whether it's about which language to teach or how to integrate different cultural practices. I think that figuring out how to disagree with each other without feeling like the other person is the enemy is the biggest challenge for not just Native and Indigenous students but for everybody. And, managing expectations regarding the time it takes to make meaningful progress is crucial. Change often requires more than short-term discussions or a single academic term—it's a continuous effort that demands patience and persistent engagement.

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Cost Sheet

Item	Amount	Description
Stipend for 3 BU Undergraduates on project	Total: \$6,960 3,600 + 1,680 + 1,680	Stipend for 3 BU Undergraduates on project calculated as: \$15/hour * 15 hours/week * 16 weeks * 1 undergraduate \$15/hour * 7 hours/week * 16 weeks * 1 undergraduate \$15/hour * 7 hours/week * 16 weeks * 1 undergraduate