A Report of the 2022 College of Natural Science Student Listening Sessions

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SUMMARY

In Spring 2022, the College of Natural Science (NatSci) hosted 18 student listening sessions to gather student evaluations of its diversity, equity, and inclusion efforts and ways NatSci can further support its student body. This report highlights some key ideas shared by the students:

- Overall, the students were satisfied with the current efforts NatSci has spent and the people they have met at NatSci and felt that NatSci had improved their experiences at the university.
- Students were especially enthusiastic about the social support NatSci has provided and felt motivated to pursue academic and life goals. They also largely enjoyed NatSci's efforts in enhancing diversity and inclusion.
- Students have also encountered academic burnout, non-academic stress, loneliness, and bias while at NatSci. Most notably, they felt that the demanding academic requirements and competitive atmosphere in NatSci have harmed their mental health.
- Students largely believed that the college leadership at NatSci should create more accessible resources (e.g., advising information sessions) and build a supportive environment (e.g., diversity and pronouns training). They also stated that life outside academia was vital in creating a sense of belonging for students, including extracurricular activities and shared artifacts.

INTRODUCTION

Background Information

The College of Natural Science (NatSci) is one of the largest colleges at Michigan State University (MSU), home to over 5,500 undergraduate students, 1,200 graduate students and postdocs, and more than 1,000 faculty and academic staff across 27 departments and programs.

NatSci is dedicated to improving diversity and inclusion, besides advancing knowledge in natural sciences. As part of the five-year *Strategic Plan*,¹ NatSci recognizes diversity and inclusion as one of its core values and strategic priorities: "Grow and support a welcoming, diverse NatSci community that empowers the best outcomes for all regardless of role, identity, or ability status" (p.3). Indeed, since 2009, NatSci has been actively promoting diversity, equity, and inclusion (DEI), defined as such:

- Diversity: the presence of individuals with differences within a collective or a group, including race, ethnicity, sex, gender, religion, sexual orientation, socioeconomic status, age, ability status, and national origin.
- Equity: a process that recognizes individual differences and the advantages or barriers associated with them to ensure everyone has access to opportunities and resources needed to meet their goals.
- Inclusion: people of all identities are visibly and deliberately welcomed, engaged, celebrated, and given opportunities to grow within the community.

Purpose of Report

This report summarizes the results of a series of student listening sessions hosted by

¹ The College of Natural Science. (n.d.). *Strategic Plan 2022-2026*. Retrieved from <u>https://natsci.msu.edu/sites/_natsci/assets/File/About/Strategic%20Plan/NatSci%20Strategic%20Plan_v20_040522_</u> <u>WEB%20FINAL_508v2.pdf</u>.

NatSci's DEI Office. These sessions focused on current NatSci students' feedback surrounding their experiences as a student in NatSci, evaluations of current efforts NatSci has engaged in, and recommendations for NatSci. As a result, this report will point to understanding and expanding initiatives for student needs in NatSci.

METHODS

Data Collection

In September 2021, NatSci emailed and met with student leaders about ways to engage students best and gain their feedback. Later in the fall semester of 2021, NatSci sent invitations to current students to sign up for the student listening sessions based on students' identities, and there was an option for open sessions as well. Each student who participated in the listening sessions was given a \$25 gift card from Kroger, Target, or DoorDash (students may sign up for multiple sessions but would not receive multiple compensations).

NatSci subsequently hosted 18 listening sessions between January 23 to February 24, 2022, of which five were restricted to graduate students, and 13 were for undergraduate students. Excluding the students who signed up for a session but did not attend, 82 students participated in these listening sessions. A summary of the session topics and participant characteristics can be found below (Table 1).

Table 1. Student Listening Session Topics				
Session (by chronic order)	Rank	Population	# of Students	
1	Undergraduate	Transfer	4	
2	Undergraduate	First-Generation	6	
3	Undergraduate	Ability/Health Need	5	
4	Undergraduate	International	2	
5	Graduate	International	5	
6	Undergraduate	LGBTQIA2S+	4	
7	Graduate	LGBTQIA2S+	4	
8	Undergraduate	Asian/Pacific Islander	5	
9	Undergraduate	Black	3	
10	Undergraduate	Hispanic, Latina/e/o/x	4	

11	Undergraduate	Native American/Indigenous	4
12	Undergraduate	Men of Color	2
13	Undergraduate	Women	5
14	Undergraduate	Women of Color	3
15	Graduate	Women	8
16	Graduate	Students of Color	7
17	Undergraduate	Open Session	6
18	Graduate	Open Session	5

Each session was assigned two facilitators from NatSci (e.g., faculty, specialists, staff, postdocs, and graduate student employees). The sessions followed a structured interview format. The facilitators opened each session with confidentiality statements and the purpose of the listening sessions and asked the participants to answer one introductory question ("Who is the person at MSU who has most influenced you? Why?") and three prompted questions related to (1) students' feeling about being a student in the College of Natural Science, (2) how the college leadership and staff can better support students, and (3) suggestions for creating a sense of community for the students and helping them feel like they belong. The facilitators then ended each session with a quote from Dr. Martin Luther King, Jr. or Dr. James Lawson, Jr.

Analytic Procedures

After the listening sessions were transcribed and cleaned, the two authors of this report randomly selected two transcripts for open coding. The authors first coded independently and then compared the codes before developing a codebook for this report. Then, to ensure this codebook is reliable, the authors randomly selected a third transcript, coded the transcript based on the codebook, and compared codes. Most of the codes matched, and the discrepancies were resolved after discussions between the two authors.

The authors then divided the transcripts by their relative weight (the number of participants and pages in a standardized font) to ensure each author was responsible for the same amount of work. Next, the authors coded the transcripts according to the codebook before aggregating all their notes into one file. After the initial coding, the authors discovered several new codes not included in the original codebook, including "negative experiences" and "financial circumstances." The authors discussed these new items with the project supervisor and adjusted the codebook before coding the transcripts again to ensure the coding process was consistent.

Data analyses followed a thematic content analysis approach. First, after coding was complete, the authors identified the key concepts by counting the frequencies of each code. The authors then developed themes based on these key concepts related to students' evaluations of NatSci's efforts to address their needs and their sense of belonging within NatSci. Verbatim quotes were used in the report where applicable, after removing filler words and identifying information.

THOUGHTS ON THE STATUS QUO

Most Influential Person

Many students reported that university personnel had the most significant influence on them since coming to MSU. They include 1) academic advisors, the "major advisors" who meet with students to plan courses, locate resources, and answer career questions; 2) course instructors, the faculty or graduate student instructor of a lecture or recitation; 3) faculty advisors, the faculty supervisors and mentors whom the student works with professionally; and 4) other staff members who provide resources outside the College of Natural Science. For example, a student said that the person who has influenced her the most is a math professor she had in her freshman year:

> "It was a really difficult class, but [the professor] was really supportive and made me feel like even if I didn't always think I could do something, I might just be psyching myself out. So that was very helpful for the rest of my college career." (Student 3, Session 13)

Indeed, many others shared the sentiment that the instructors, mentors, and advisors were "supportive," that they helped the students adjust to the university and navigate its resources and made them feel more confident being a student at the University and NatSci. A few students also discussed how these people offered professional development opportunities and the resources for their academic success.

Some students also find peers and their informal social networks to be impactful on their experience at MSU. These include 1) other students they have encountered and socialized with, 2) peers that the student has built a stronger connection to and considers "friends," and 3) the student's family members. In most cases, the students met these influential persons while living in the dormitory (e.g., roommates and resident advisors [RAs]), attending classes, and participating in student organizations and other campus events. They felt that these people had created a welcoming environment and provided them with the necessary social support, especially when the students were new to college. For example, one student said an upperclassman from a student organization they were in significantly influenced them "because [the student was] really new to the school and the environment here. [They were] from [another country], so it was quite a journey. So he helped [the student] a lot, and also he shared some tips for [the student] to survive that academic environment here" (Student 2, Session 4).

Students of Color

Students from underrepresented racial and ethnic groups largely thought of university personnel—especially academic advisors, faculty advisors, and course instructors—as the most influential person in their experiences at MSU. These students attributed the impact of specific individuals not only to their ability to provide professional development opportunities but also to their exhibited empathy. This empathy was shown through shared identities or deliberate actions

taken to benefit the students. In fact, many students of color felt that without these people, they would have been lost or given up.

Women and LGBTQIA2S+ Students

Like Students of Color, women and LGBTQIA2S+ students acknowledged the university personnel. In addition, many also thanked their peers, saying that these people made them feel welcome or inspired them to achieve higher. Shared identities were also crucial in the students' narratives, be they professional or personal. Most women and LGBTQIA2S+ students deemed an individual from their college or program the most influential figure. These students supported and encouraged one another due to their common academic identities and career objectives. A few students also discussed how other LGBTQIA2S+ or women students in STEM majors made them feel more included.

Students from Other Minoritized Groups and Open Sessions

Most students from other minoritized groups (e.g., students with ability/health needs, firstgeneration, transfer, and international students) and those who participated in the open sessions felt that their academic advisors and other staff members had the most influence on their experiences at MSU. Perhaps because of their lack of knowledge about college life (for reasons such as cultural differences, language barriers, being the first in their family to attend college, mental and physical health issues), they especially valued the services and resources—many students thanked the academic advisors for being accessible and offering help whenever they were in need; one student acknowledged the help other university employees had offered them too, saying that the counselor from Counseling and Psychiatric Services "just makes you relax when you talk to her and *feel like a normal person*" (emphasis added; Student 2, Session 3).

Positive Experiences in NatSci

Most students were satisfied with being a student in NatSci, saying they "had great experiences" and "enjoyed" their time. Some students considered being affiliated with NatSci a privilege and felt proud to be a part of it. For example, one international student said, "...I definitely feel very privileged to be a part of MSU and the College of Natural Science and the [department]. It's definitely a lot of good things happening, a lot of the policies that are said by the college as well" (Student 2, Session 5). These students' positive experiences in NatSci were influenced by various factors, the most prominent ones being motivation, support, as well as diversity.

Motivation

Many students expressed satisfaction with their majors, resulting in positive academic experiences in NatSci. For example, one student said,

"I think the transition into college-level math courses was a very abrupt transition. It became a lot more challenging and of course, I still love math. That did nothing to stop my love for math, but it's definitely on a very different level, and I'm just very proud of myself for really committing to sticking through and dedicating myself to this much deeper learning that I've ever had the opportunity to engage in before." (Student 1, Session 6)

Meanwhile, students reported feeling motivated to achieve higher by the professors and others from the College. For example, many have felt the classes were intellectually challenging, and they were inspired to pursue science further. One student said, "I've enjoyed being a part of the College of Natural Science. I think that the courses it has to offer along with the professors who teach those courses have been super helpful, super great" (Student 3, Session 13).

Support

In addition, many students expressed satisfaction and gratitude for the support they

experienced at NatSci. The students shared that the college has an overall supportive atmosphere, and various members of the university contribute to this climate. Some students expressed satisfaction with the support provided by staff and professors. One student said, "For the most part, I found that a lot of faculty and staff in general and college leadership are supportive and present for a lot of students" (Student 2, Session 10).

On the other hand, some students mentioned that a supportive environment is established through mutual assistance between the faculty and the students. This supportive atmosphere also led students to have joyful experiences as a community. For example, one student stated, "There's so much support within the community and everything, and not only the professors but the students as well. I think that's been really helpful just having peers around to help you with things, and so I think it's been really enjoyable so far" (Student 4, Session 3).

Diversity and Inclusion

The students also appreciate the diversity they have encountered in NatSci. To them, diversity meant having a variety of members and their backgrounds at the core of the community. This diversity broadens students' perspectives and provides positive stimulation. For example, one student said, "My favorite thing about the Natural Science College is the variety. I feel like there are a lot of different majors and different people, and so it's refreshing to have people that are other majors in similar classes that I'm taking, and overall I feel like it just fits all of my interests really well" (Student 3, Session 13).

In addition, students felt satisfaction in pursuing similar goals together while interacting with colleagues who had different backgrounds than themselves, as one student specified, "I would say overall, it's been pretty positive because of the different groups I get to interact with" (Student 4, Session 16). In a similar vein, another student agreed, "I would say I'm excited to be a student

here. I'm just starting my second semester. I've met so many people with different majors, different backgrounds, totally different lives than me. And we're all shooting toward the same goal" (Student 1, Session 11).

Furthermore, it was implied that such an environment contributed to minoritized students feeling that they could perceive this college as a safe space. Some students perceived that MSU and NatSci were making active efforts to include students from minoritized backgrounds. For example, one student said, "I want to say I really like the grad school, the program here. So, I feel safer actually than when I was in [another state]. I think that equality is being stressed here, I mean is being emphasized here, so I feel, actually, the College of Natural Science here is, it is great so, I like being here" (Student 3, Session 7). On the other hand, diversity was also linked to the various opportunities given to them, and students were satisfied with the vast opportunities. One student shared,

"The College had been actively promoting diversity and inclusion. I really haven't had any problems in the College of Natural Science. I really like our advisors when they release those, I don't know if it's biweekly or monthly, those reminders. There's a lot of opportunities there that I really enjoyed." (Student 5, Session 17)

Negative Experiences in NatSci

Indeed, the students were highly satisfied with what the College had to offer and their dedication to improving students' experiences. However, many students still expressed concerns despite feeling positive about the overall NatSci experience, including stress (both academic and non-academic), loneliness, and experiences of bias and discrimination.

Academic Stress

Many students felt stressed and overwhelmed. The demanding academic standards in

NatSci were one of the factors behind this, as illustrated by the experience of a student who was disappointed and felt like a failure because she was not accepted into her desired program. She added, "I killed myself for two years to get my GPA up to a 3.9 and to make sure I had all my classes," but she had to pick up another major because she could not get into the engineering program in time, "it feels like they just put me here because I wasn't good enough to do what I wanted, despite all my work" (Student 2, Session 6). In addition, many graduate students felt overworked or expected to sacrifice their time for academic requirements. For example, one felt "there's a sense of guilt when I'm not doing work or I'm taking time to myself" (Student 4, Session 15). Other graduate students also commented that they stayed in the lab or office till late at night or worked on weekends—the lack of work-life balance took a toll on their mental and physical health.

Another factor that contributed to student stress was the highly competitive environment within NatSci. Some students lamented that others saw things as a zero-sum game, "they ultimately see you as someone they're competing against because the position is going to be taken by you if they help you" (Student 3, Session 10). Many interviewees found it detrimental to their well-being when their peers frequently discussed their academic performance and future plans, comparing them to each other.

Non-Academic Stress

Students also felt burned out because the resources available at NatSci did not match the high academic demands. A few students expressed that they were still figuring out their academic careers and did not know whether their current major was right for them. However, securing an appointment with an academic advisor to discuss these matters was difficult. In fact, several first-year students and students who just switched majors have voiced concerns that they did not know

what prerequisite courses were needed (especially when some courses were only offered biannually or in certain semesters). One even missed the deadline to add a course required to complete their major because they could not meet with their advisors. In addition, some transfer students had questions regarding what course credits transferred in and what courses they had yet to take. Overall, the students felt that while there were a lot of academic advisors in NatSci, there were even more students. And even though some academic advisors would send email reminders about different resources, students were still confused about what was available and where to locate them.

Finance was another stressor for many. On the one hand, many students, especially students from underrepresented backgrounds (e.g., first-generation students), complained about the cost of pursuing higher education in STEM fields. There were simply too many unforeseen expenses, such as educational technologies, textbooks, and lab fees; additionally, if a student wanted to sign up for summer courses, their financial aid does not usually cover the costs. On the other hand, international students had to pay higher tuition fees and were often ineligible for scholarships and part-time employment, making it even harder financially for them. Additionally, for students employed by NatSci and especially graduate students, the human resources system was also sometimes confusing. For example, several graduate students were confused about their payment because their funding came from external sources (e.g., fellowships) instead of from within NatSci. And to figure it out was frustrating too, because these students "couldn't get a straight answer from anyone and nobody would take responsibility...the departments won't communicate with each other" (Student 7, Session 15).

Loneliness

Besides feeling stressed, some students felt lonely being a student in NatSci, though they

attribute their loneliness to various reasons. First, some students felt lonely because there were not adequate opportunities in NatSci to socialize with others and make friends, especially students of their majors. One student commented that the only time she could meet other NatSci students was when they were having a class together, and all they could talk about was related to schoolwork:

> "If I had to say anything, I think I would just say sometimes it feels like we really just don't know anybody else. It can be a very lonely process being here. Sometimes I feel like I only see other members in my classes. I feel like there aren't any community activities, like a very rare chance, opportunities to connect with other NatSci students outside of academics." (Student 2, Session 9)

Even so, some students complained about being unable to socialize with their classmates and that it was hard to form study groups even when other students were also struggling with the course. It could be traced back to the competitive atmosphere in the College as well. For example, another undergraduate student said, "I would say that is really competitive, even in classes that probably everyone is doing well in. It's just like a race to me, it's not healthy, but I just feel like I have to be better than everyone around me because of how Michigan State made me" (Student 3, Session 9).

Besides feeling lonely because of not being able to make friends in academia, some students talked about feeling left out, that they were "the only one" from an underrepresented group, and felt that others did not validate their experiences. Especially for Students of Color, they often "walk into a classroom...[and] be the only person of color in there" (Student 3, Session 10). Another student was able to overcome the identity-based barriers because "science is the same regardless," still, he added,

"...but at the same time, I'm going to take a step back and look around me. I realize,

wow, there's not a lot of people like me, being first-gen. I'm the first in my family to graduate high school, and all the struggles my family has as well. There's not a lot of people I can relate to with that, or talk to about that, or joke around about stuff like that." (Student 7, Session 16)

Last but not least, even though science may be "the same" for some, it was not the case for students with different academic interests, that "Sometimes [their] research isn't recognized as valid, so it can generate a toxic environment...where [they're] not always getting the most support from people in the department" (Student 4, Session 15). This was particularly true for graduate students who had some freedom to pursue their own research interests.

Bias

Despite the best efforts, students still felt they were sometimes subject to bias. For example, women students were often assumed to take the secretary role and were called "bossy" if they tried to advocate for themselves. In addition, some students shared that they often experienced micro-aggressions from other students and faculty members, whether about their race or gender. In extreme cases, students have also experienced overt discrimination: "…I'll meet people who are white, or not of color, and they'll be like, 'Well, you got in because your last name is this,' and I'm like that's horrible. Don't ever talk to me that way" (Student 2, Session 10).

Others attributed the issue to systematic flaws. For example, an LGBTQIA2S+ student said that they were afraid to disclose their sexual orientation and purposefully did not socialize with other LGBTQIA2S+ students in the department because "if [they] identify myself [as] queer or gay then people would automatically think [they] belong to another group" and they felt that coming out would "jeopardize [their] career" (Student 3, Session 7). In summary, students were concerned that the STEM fields, and inevitably NatSci, were cis-heteronormative and dominated

by white American men, making it difficult for folks from minoritized and underrepresented backgrounds to fit in.

SUGGESTIONS FOR THE FUTURE

The Role of College Leadership

Creating Accessible Resources

First and foremost, the students felt that the current resources provided by NatSci could be better. One area regarded academic advising. While the students were glad about the personalized advising in a one-on-one appointment, they also felt that their questions and concerns often did not warrant an entire appointment and could be addressed more casually. It would be beneficial if NatSci set up regular information sessions where the academic advisors would meet multiple students in a classroom or virtually, and the students could come in anytime to ask questions. A few students also suggested that these sessions be themed as well—for example, one session could just be about prerequisite classes to get into an academic major, and anyone having related questions could join and learn. At the very least, students felt NatSci should allow group appointments with academic advisors or flexibility in the appointment scheduling process (e.g., walk-in appointments, flexible appointment lengths, etc.).

To many, inadequate communication with the teaching staff (i.e., graduate instructors and professors) was also problematic. To that end, the students wanted more office hours or after-class tutoring sessions, especially with the "weeder" classes—challenging courses that were thought to keep "unqualified" students from entering a major. Indeed, the decision to extend office hours is mainly up to individual instructors, but NatSci can encourage them to offer more learning resources to students (e.g., tutoring). Alternatively, NatSci might consider hosting regular study groups for students to study as a group and help each other learn. For example, NatSci can book a

classroom in the Natural Science Building every Wednesday afternoon, supply coffee and snacks, and market it to students to come and study together with other students in NatSci. NatSci may also invite course instructors to come to these study groups and answer questions.

Another area where better resources were needed was student finances. Of course, there was little NatSci could do regarding tuition and fees. Still, students felt it would be beneficial if the College could loosen the bureaucratic hassles related to financial aid and scholarship.

Finally, besides making its resources more accessible, students also wanted the College also to make the information more accessible as well—that is, the College should spend more effort promoting these resources to make sure that students are indeed aware of them and know how to use them via emails or information sessions. Some academic advisors have been sending out routine reminders to their students about the different resources available to them and events on campus, which the students who did receive them found very helpful. Perhaps there need to be college-level initiatives too.

Building a Supportive Environment

As mentioned, some students felt the overall atmosphere at NatSci was hostile—it was over-competitive, accompanied by micro-aggressions and overt biases. Therefore, to promote a sense of belonging for students in NatSci, building a supportive environment where students feel safe and respected is crucial. This means the college leadership must acknowledge individual differences and create resources for different populations. One suggestion is to recommend individuals in NatSci to take bias training. This could mean highlighting racial and ethnic diversity and eliminating bias and stereotypes regarding the students' race, ethnicity, country of origin, etc. This could also mean emphasizing gender and sexual diversity and educating the students and employees to normalize using pronouns. Especially in a time of uncertainty and rising hate against minoritized populations, some reassurance from the College leaders that NatSci cares about them is much appreciated.

Sharing Responsibilities with Students

A third action item the students recommended to the college leadership was to share responsibilities. First, this means sharing responsibilities with the students and giving them a voice. For example, some students shared that they would like to have student representatives who could bring students' concerns directly to the college leadership, such as the Dean's office, the university president, or even the Board of Trustees. In addition to having dedicated messengers, students also wanted town hall meetings with the college leadership to meet the leaders and voice their opinions.

Second, besides feeding the students information and resources, the college leaders should give them trust and patience and let students figure things out themselves. Many students felt that attending college was not only about their professional development but about becoming better persons as well. Therefore, they should have the opportunity to learn and practice. One student summarized it, "Communities aren't going to reach out to you necessarily, but if you want to be a part of it, it's something that you yourself are going to have to go out there and get [it]" (Student 4, Session 10).

Promoting a Sense of Belonging

Many students highlighted the significance of community and identification within the college or department as critical factors in fostering a sense of belonging. The feeling of belonging was found to have a profound impact on students' overall experiences, both positive and negative. However, it was observed that the scope of identification often remained limited to the department level rather than encompassing the entire NatSci. The students identified with their departments and majors more than they did with NatSci. Therefore, to enhance the sense of belonging at NatSci,

it is crucial to start small and implement interventions that promote a sense of community on the department level first, and gradually build up to the college level. A stronger sense of belonging can be cultivated by fostering a collective identity and emphasizing the interconnectedness of all students within NatSci.

Interaction and Connection

Similarly, most students strongly desired opportunities to connect with their peers in their departments and across NatSci. These opportunities for interaction and connection were vital for building a sense of belonging. Especially in the post-COVID era, where students are just coming back from the limited social interactions due to remote learning and physical distancing measures, NatSci should prioritize creating platforms and opportunities for students to engage with one another. This way, NatSci can strengthen the bonds between students and create a more cohesive and supportive community. Specifically, the college can enhance students' sense of belonging and engagement by providing opportunities for extracurricular activities, clubs, and organizations that allow them to explore their interests, develop skills, and connect with peers who share similar passions—in addition, encouraging collaboration between different departments and promoting interdisciplinary initiatives further fosters unity and a shared sense of purpose, contributing to a vibrant community within NatSci.

Shared Identity

Shared identity among individuals, particularly for minoritized students, is crucial in influencing their sense of belonging and overall satisfaction and confidence within NatSci. Addressing the representation gap among employee and leadership positions is essential to create a more inclusive environment. In addition, greater representation is needed for Students of Color, women, LGBTQIA2S+ people, Native American/Indigenous students, and students from other

minoritized groups (including ability/health needs, first-generation students, transfer students, international students, and students participating in open sessions). A stronger shared identity can be fostered by increasing diversity and ensuring that individuals from these underrepresented groups hold visible and influential roles within the college. This will help promote a sense of belonging, empower students, and provide them with role models and mentors with similar experiences and backgrounds.

Common Artifact

Common artifacts can also promote a sense of belonging within NatSci. Many students expressed that having tangible symbols such as t-shirts or stickers representing their identification with NatSci would significantly strengthen their connection to the institution. These artifacts serve as visual reminders of their affiliation and create a sense of unity and pride. By providing students with opportunities to showcase their college identity through these common artifacts, the college can foster a sense of belonging and instill a shared understanding of community among its students. These tangible representations of college pride can help students feel more connected and engaged, ultimately enhancing their overall college experience.

In sum, NatSci can improve the sense of belonging by implementing interventions that encourage a shared identity and foster a sense of community among departments. This can be achieved by creating more opportunities for students to interact and engage with one another through initiatives like student organizations and fellowship programs. In addition, addressing representation gaps and promoting inclusivity within the college environment is crucial. Finally, introducing common artifacts such as t-shirts or stickers can also significantly strengthen students' connections and instill a sense of pride in their college affiliation.