

Prepared by Annika Socha and Laura Howes March 2021

Executive summary

Now in our eighth year, Bass Connections has over 2,100 program alumni who have since graduated. This report summarizes key findings from the first survey of Bass Connections alumni, which sought to understand the lasting impact of the program on students including influence on career paths, preparation for future careers and how alumni might like to stay connected. This survey also invited alumni to provide feedback and suggestions for improving the program with the benefit of hindsight.

Key findings:

- 80% of respondents agreed that Bass Connections was a high-impact learning experience.
- When asked to select the *one* most important outcome of participating in Bass Connections, gaining practical experience was the most commonly cited benefit (29%), followed by developing skills used in their current position (19%) and finding a career interest (16%).
- Respondents were most likely to note that Bass Connections helped develop their abilities to think critically, demonstrate leadership on a team and conduct research.
- The majority of alumni remain in touch with their team leader(s) and/or other students from the team. Written comments suggest that for some students, the program helped connect them to mentors who have had a great impact on their personal and professional lives.
- 54% of alumni are currently employed, while 44% are enrolled as a graduate/professional student.
 Among graduate students, 33% are pursuing a PhD and 26% are pursuing an MD. Employed alumni are mostly likely to be working in for-profit corporations, followed by non-profit organizations or NGOs, in a wide variety of jobs.
- 68% of alumni enrolled in a graduate/professional degree program reported that Bass Connections influenced their decision to pursue graduate studies, and 74% of employed alumni reported that their Bass Connections experience influenced their professional trajectory.
- 82% of alumni currently enrolled in a graduate/professional degree program felt that their
 experience in Bass Connections helped prepare them for their current studies, and 78% of employed
 alumni reported that their Bass Connections experience helped prepare them for their current
 position. Both groups indicated that Bass Connections helped prepare them to conduct research,
 work collaboratively in teams and work across different fields of knowledge.
- To stay connected, alumni were most interested in receiving an annual newsletter about the
 program and mentoring or advising students on Bass Connections teams that relate to their area of
 interest or expertise.

To jump to a section of this report, click any link below:

- Overview and methodology
- Bass Connections impact
- <u>Post-graduation paths</u>
- Alumni pursuing additional degrees
- Employed alumni
- Alumni engagement
- Final reflections and suggestions for improvement
- Conclusion

Overview and methodology

In October 2020, we surveyed Bass Connections alumni who graduated from 2014 to 2019. Respondents were asked to respond to a number of common questions related to the impact of the program on their post-graduation path, how well they felt prepared for that path, how often they draw on skills that the program portends to develop in students (e.g., teamwork, research) and how they might like to stay engaged. The survey included between 20 and 25 multiple choice and open-ended questions (some question sequences varied based on the respondents reported post-graduation path).

Response rates

The survey was administered to 1,220 alumni with active email addresses from the class of 2014 through the class of 2019, with the exception of graduates of the class of 2015 – those alumni were excluded because they were scheduled to receive the Duke University alumni survey during the same period and we wanted to avoid survey fatigue. As Bass Connections is a vertically-integrated program including graduate and undergraduate students, the survey pool included alumni of Duke undergraduate, graduate and professional degree programs.

In total, 156 surveys were completed. Response rates for each survey population were as follows:

Survey population	Surveyed	Respondents	Response rate
Undergraduate alumni	858	103	12%
Grad and Professional alumni ¹	362	53	15%
Total	1,220*	156	13%

^{*4} survey emails bounced but we cannot identify in the survey software to which population they belong

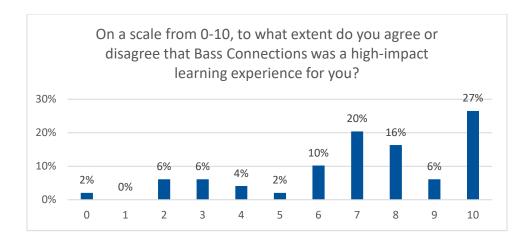
To evaluate whether those who took the time to respond to the full-length survey are biased, after closing the survey, we sent a one-question survey to those who did not respond to the full-length survey. This one-question survey asked alumni to what extent they agreed or disagreed that Bass Connections was a high-impact learning experience for them on a scale from 0 (completely disagree) to 10 (completely agree). This survey was sent to 1,085 alumni – 49 of whom responded.

Survey population	Surveyed	Respondents	Response rate
Undergraduate alumni	766	29	4%
Grad and Professional alumni	319	20	6%
Total	1,085*	49	5%

^{*4} survey emails bounced but we cannot identify in the survey software to which population they belong

The vast majority of respondents agreed that Bass Connections was a high-impact learning experience. This indicates that although the response rate to the full-length survey was relatively low, it does not necessarily indicate that non-respondents were more negatively inclined towards the program. Of course, it is also possible that those who took the time to respond to the short survey may also be more favorably inclined. However, this seems somewhat less likely since the short survey required a very minimal time investment.

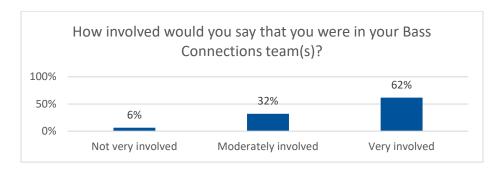
¹ Alumni of graduate and professional programs include 37 professional master's/JD, 11 PhD, 3 DPT, 2 ThD, and 2 research master's.



The overall response rate is relatively low, although perhaps not unexpectedly so based on the nature of the survey. However, we have no way of assessing how many alumni actually received the survey. It is also worth noting that alumni with active contact information in the system are likely to be more engaged than other alumni, which may introduce a degree of bias.

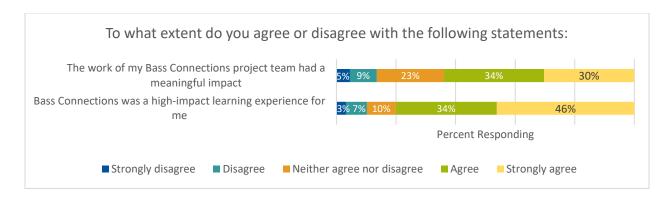
Degree of particpant involvement

Recognizing that not all students invest equally in their Bass Connections experience, and that some students participate over multiple years, whereas others may drop after one semester, we asked respondents to state their level of engagement. The majority of respondents (62%) reported that they were very involved in their Bass Connections team(s), while 32% reported being moderately involved. Only 6% of respondents said they were not very involved. When considering the results in this report, it is important to note that respondents had varying levels of engagement in the program. In addition, the fact that the majority of respondents reported being "very involved" also suggests a predictable bias in the survey response pool.



Bass Connections impact

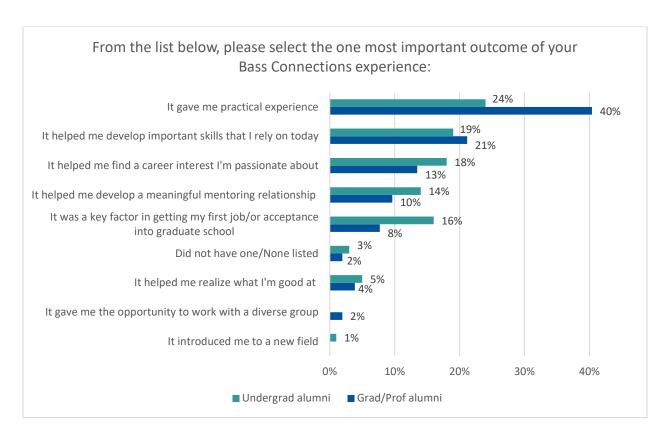
Most respondents (80%) agreed that Bass Connections was a high-impact learning experience, even if they felt that the work of their team did not have a meaningful impact. The vast majority of respondents also reflected positively on their experience at Duke, including alumni did not feel that their participation in Bass Connections was high-impact. Not surprisingly, of those that responded that they were not very involved in their Bass Connections team, most answered that they were indifferent or did not agree that the work of their team had a meaningful impact or that Bass Connections was a high-impact learning experience.



Most important outcomes

When alumni were asked to select the *one* most important outcome of participating in Bass Connections (from a pre-determined list of options), gaining practical experience was the most commonly cited benefit (29%), followed by developing skills used in their current position (19%) and then finding a career interest (16%). The 2% of respondents who said that the program did not result in a meaningful outcome for them were all respondents who reported that they were not very involved in their Bass Connections team.

As shown in the chart below, graduate/professional student alumni are more likely than undergraduate alumni to note that they benefited from the opportunity to gain practical experience. Whereas, undergraduate alumni were more likely to note that they benefitted from finding a career interest/passion, developing a meaningful mentorship relationship and gaining acceptance into a post-graduation job or graduate school program.



Skill development

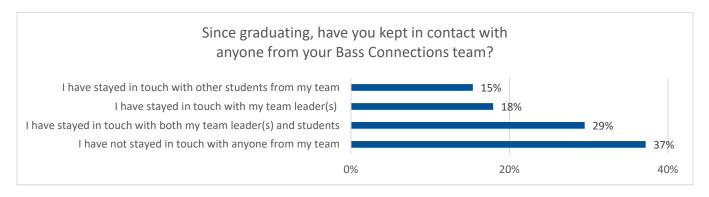
When respondents were asked to rank *up to* three skills that they believe Bass Connections helped them develop, based on a weighted average ranking, the top skills reported by alumni were critical thinking and analysis, demonstrating leadership on a team and research skills.

There are notable differences between how undergraduate alumni and graduate/professional alumni responded to this question. As shown in the table below, graduate/professional student alumni are far more likely to report developing the ability to work with external stakeholders/clients and organizing and managing projects, and undergraduate alumni are far more likely to note gains in research skills. These differences are likely due to the different roles that students play on teams based on their student level, as well as the fact that these student groups start with different levels of baseline skills.

Alumni skills developed	All alumni	UG alumni	Grad alumni
Critical thinking and analysis	1.7	1.6 (#1)	1.9 (#4)
Demonstrating leadership on a team (e.g., mentoring,			
managing up, taking initiative)	1.8	1.6 (#2)	1.9 (#3)
Research skills (e.g., literature review, research design, data			
analysis)	1.9	1.8 (#3)	2.1 (#7)
Content knowledge/expertise in a specific topic	2.0	2.1 (#5)	1.9 (#5)
Working effectively on a team (e.g., communication, meeting			
obligations, conflict resolution)	2.0	1.9 (#4)	2.3 (#8)
Organizing and managing projects	2.0	2.2 (#7)	1.8 (#2)
Working with external stakeholders/clients	2.0	2.2 (#8)	1.7 (#1)
Solving complex problems	2.1	2.1 (#6)	2.0 (#6)
Presentation skills	2.3	2.3 (#9)	2.3 (#9)

Lasting relationships

To assess the lasting impact of relationships formed through the program, we also asked respondents whether they remain in contact with either faculty or students from their team, and found that the majority of respondents remain in contact with someone from their team, with relationships between students and team leader(s) tending to be the most lasting. This finding is supported by the Bass Connections Faculty Impact Survey in which faculty reported that Bass Connections supports the development of deeper and more lasting relationships between faculty and students than those that typically develop in the classroom.



Reflections on program impact

Written survey comments also add context and weight to the above data, elaborating on the most impactful elements of Bass Connections:

"I have developed relationships with my mentors that I believe will persist long past my graduation. I still collaborate on research with my grad student mentor, and they opened the doors to so many incredible opportunities for me. If anything, it has made me develop such a deeper respect for the impact quality mentorship can have on a person's life. I feel extremely lucky and grateful to have found that through Bass Connections."

"The project cemented my interest in science policy and led me to pursue it as a career path. Now, I'm a AAAS fellow in Congress."

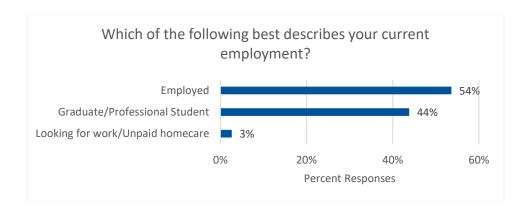
"I was given the opportunity to project manage a large part of my Bass Connections project - researching, interviewing stakeholders, and writing the final report. When I became a consultant the next year, I already knew the skills, and started managing evaluations with clients just a year out from graduation. Bass Connections allowed me to take on responsibility quickly and continue to grow."

"My Bass Connections experience is one of my fondest memories of my time at Duke because of the intimate size of the group and the mentorship we received from the team's leader... At the end of our project, (our team leader) published a journal article about our group's finding, and materially, it's been helpful for me to reference the article during interviews, job searches, etc."

"The Bass Connections team which travels to the UNFCCC COP was an absolutely incredible opportunity that still comes up frequently in my job interviews today. But more broadly, the skills developed in working on projects are much more transferable after graduation than skills gained from traditional coursework. These include presentation techniques, experience communicating with stakeholders beyond just your professor, and confidence in creating your own project timeline outside the prescribed mandate of a syllabus."

Post-graduation paths

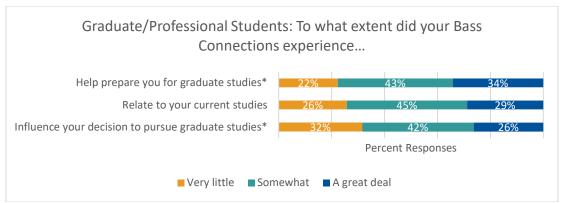
Most alumni reported being currently employed (54%) or enrolled as a graduate/professional student (44%), the remaining alumni were either looking for work or working in the home unpaid. Logically, the majority of alumni who are currently enrolled as a graduate/professional student are Duke undergraduate alumni (54 of 67). Alumni who are currently employed (n=82) include 43 undergraduate alumni and 39 graduate/professional student alumni. Since graduating, 66% of alumni noted that they have held at least one other position prior to their current position for at least 6 months.



Alumni pursuing additional degrees

Program alumni who are currently graduate/professional students (n=67), or who are now employed but completed graduate studies after graduating from Duke (n=11), listed a wide range of graduate programs, with most indicating they were pursuing a PhD (33%) or an MD (26%). Other types of programs mentioned were various master's programs as well as MBAs, JDs and dual-degree programs.

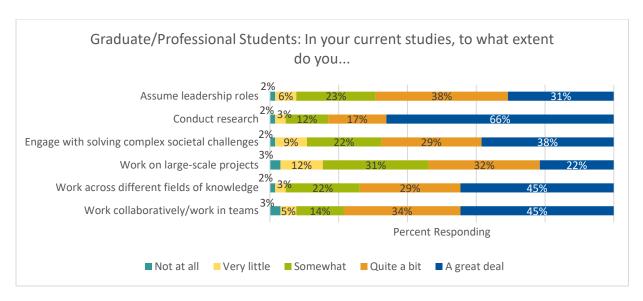
Sixty-eight percent of these alumni reported that Bass Connections influenced their decision to pursue graduate studies either to a great degree (26%) or somewhat (42%), and 74% said their current studies have at least some relation to the topic of their Bass Connections project. The majority (82%) of current graduate/professional students felt that their experience in Bass Connections prepared them for their current studies to at least some degree.

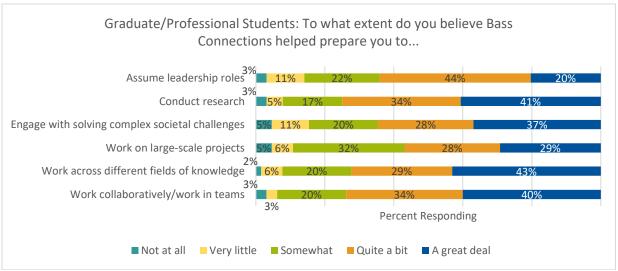


*Includes data from 11 alumni who completed graduate studies after graduating from Duke, but are now currently employed

Preparation for current role: Alumni enrolled as graduate/professional students

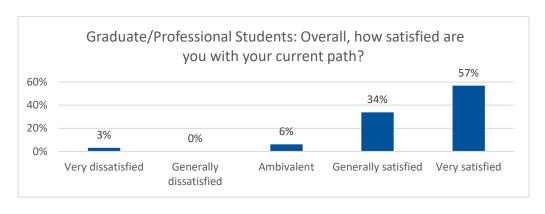
When graduate/professional student alumni were asked to what extent they currently perform tasks commonly associated with participation on a Bass Connections team, and to what extent their participation in Bass Connections prepared them for those tasks, the majority of alumni reported that the program prepared them well for their current tasks, with some notable tasks being conducting research, working collaboratively in teams and working across different fields of knowledge.





Satisfaction with current path: Alumni enrolled as graduate/professional students

As one measure of whether Bass Connections might help students gain a better understanding of their post-graduation goals, the survey asked respondents how satisfied they were with their current path. The majority of current graduate/professional student alumni (91%) indicated they are either generally or very satisfied with their current path. Only 6% were ambivalent, while 3% were very dissatisfied.



Reflections from alumni enrolled as graduate/professional students

The following comments from alumni pursuing graduate/professional studies elaborate on how Bass Connections helped shape their path:

"I gained much more independent research experience through Bass, which has helped me in my graduate school pursuits."

"Bass Connections gave me a really early appreciation for applied research -- something I've carried through my career of community-engaged LGBTQ public health research and now into my graduate studies in public policy."

"It was life-changing in that it opened my eyes up to health disparities in a way I had never learned or cared much about before. This was a large part of my motivation to go to medical school, and is a daily part of our conversations in the field now."

"Participating in Bass Connections helped me further my interests in statistics and education and clarify which avenues of pursuing those interests would be the most impactful and best fit for me."

Employed alumni

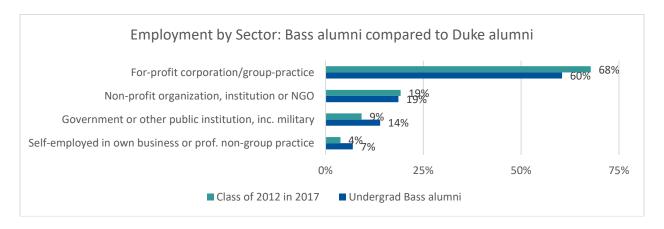
Those who indicated they were currently employed (n=82) listed a wide diversity of jobs, including various management, research, consulting, medically related and academic positions with large corporations, universities, non-profits and government agencies.

By sector, Duke undergraduate alumni (n=43) are most likely to be employed in the for-profit sector, whereas Duke graduate/professional alumni (n=39) are most likely to be working in the non-profit sector. Of the 19 graduate/professional alumni working in the non-profit sector, five are in faculty positions, three are medical providers and the remaining 11 are in a wide range of non-profit research and policy positions.



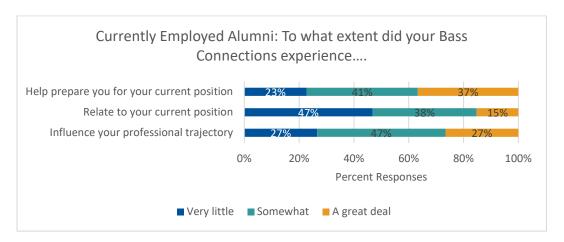
To provide a basis of comparison, the chart below compares employment by sector for Bass Connections undergraduate alumni (n=43) with employment by sector for the class of 2012 based on the most recent Duke-wide alumni survey administered in 2017. At that point in time, the class of 2017 was five years post-graduation which is the closest available comparison group, although the alumni in the Bass Connections pool includes alumni who graduated between one and six years ago. While these groups

are only approximate comparisons, the finding that Bass Connections alumni are more likely to be employed in the social sector is also reinforced by the annual survey administered to graduating seniors which has consistently shown that Bass Connections alumni are significantly more likely to indicate that they expect to work in with non-profit organizations/NGOs and government organizations in their careers.



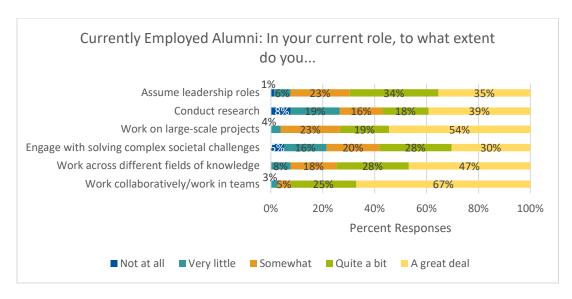
Influence on current path: Employed alumni

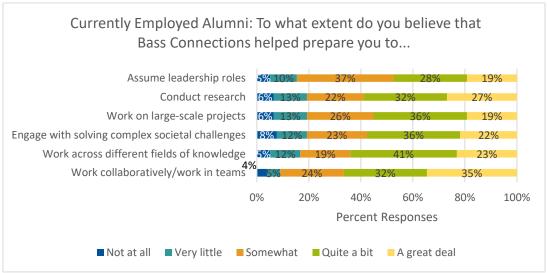
When asked to what extent their Bass Connections experience influenced their career path, only a slight majority (53%) reported that the topic of their Bass Connections team has a strong relation to their current position. However, 78% of respondents reported that their Bass Connections experience helped prepare them for their current position, and 74% reported that it influenced their professional trajectory.



Preparation for current role: Employed alumni

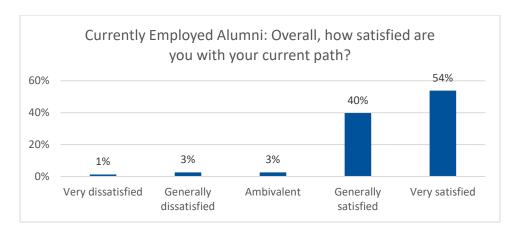
The vast majority of employed alumni also reported that participation in Bass Connections helped prepare them for a variety of tasks they use in their current role. Most notably, large numbers of alumni reported that Bass Connections equipped them to work across different fields of knowledge and conduct research.





Satisfaction with current path: Employed alumni

Most of the currently employed alumni (94%) reported being satisfied with their current path. Only 3% were ambivalent, while 4% were generally to very dissatisfied.



Reflections from employed alumni

Comments from employed alumni the impact of Bass Connections on their career trajectory include:

"Great introduction into 'real-world' issues that are happening. I learned how implementation science in global health really happens - before I even knew that was a field of study. Currently, I'm gaining advance knowledge in this field and still talk about and think about the two Bass Connections projects I worked on while a PhD student at Duke."

"It solidified my entire career path. I owe so much of where I am and where I am heading to the team I worked with during Bass Connections."

[About the lasting impact] "The skills I acquired in terms of project management and helping to lead a team with a complex objective and no pre-determined path."

"It was such a pivotal moment for me in discovering a content area of interest and how much I truly wanted to build a career in research."

Alumni engagement

To determine how alumni would like to stay connected with Bass Connections, we provided a list of alumni opportunities and asked respondents to select opportunities of interest. Alumni were most interested in receiving an annual newsletter about the program and mentoring or advising students on Bass Connections teams that relate to their area of interest or expertise. Alumni were least interested in participating in events to share their experience or participating in a working group to implement an alumni engagement strategy.

Opportunity	Count
Receiving an annual newsletter with updates on the program	
Mentoring/advising students on a Bass Connections project team related to my area of interest/expertise	
Serving as a judge for our annual poster competition or the graduate student mentorship award	58
Attending a DAA event in my region related to Bass Connections	56
Serving as an external partner/client on a Bass Connections project team related to my area of interest/expertise	55
Writing a short alumni reflection or participating in a video reflection series	51
Participating in events/activities to share my Bass Connections experience with other students/alumni/etc.	
Participating in a working group to help us plan and implement our alumni strategy	37

Other written suggestions for engaging alumni included:

- Receiving updates on the projects they participated in
- Webinars or some other method to keep alumni posted on current projects
- Allowing alumni to be team members for projects
- Using social media such as Instagram or Twitter

Final reflections and suggestions for improvement

We also invited respondents to offer final reflections on the impact of Bass Connections as well as suggestions for improving the program with the benefit of hindsight. Most of the comments reflected on very positive experiences, including how the program provided alumni with practical experience, a valuable skillset, experience working in diverse contexts and meaningful relationships with mentors and peers. A sampling of comments are provided below for further context.

Opportunities for improvement

When asked how Bass Connections might be improved, alumni suggested increasing the program's reach to students, collaborating more with other Duke programs and monitoring how project teams are working together to ensure equal opportunities for involvement. A sampling of specific comments are included below for context.

"I think better advertise how to get involved and more pressure to get involved. I only accidentally got volunteered on a project and never felt legitimately on the team. (I never applied or anything.)"

"While my Bass focus was in education, my academic focus was largely separate as the program was just getting off the ground. I think finding ways to better connect Bass activities to other Duke learning outcomes would have improved my experience."

"The experiences are shaped very strongly by the faculty leads, which can be good and bad. The faculty are generally already experts in the field and already have strong opinions/ideas/hopes on the project. So students may not be as much "team members" as advertised. The process of allowing students to contribute to the direction of the project can be more or less of a charade. Again, this isn't all bad, because the faculty are genuine experts, so they do know best. A little more honesty about what's going on could help, though."

"I was listed on a Bass Connections Project but had virtually no involvement in it and didn't actually consent to being listed on the project by my advisor. I still wanted to complete this survey so that Bass Connections organizers could know that this was the case, and perhaps may be the case for other graduate students as well. Perhaps this should be taken into consideration when reviewing Bass Connections Project applications (e.g., are all the people listed going to have active roles or are they only listed to fulfill the requirement of having a mix of undergrad/grad/professional students?)."

"In general, I did not feel that Bass Connections was a positive experience as a graduate student. Several other graduate classmates expressed this same view. I did not feel engaged by the team- when I was no longer able to attend meetings due to classes, the leader didn't seem interested in engaging me further (even when I reached out specifically to continue to be engaged); I was placed on the same level as the undergrads, and wasn't given opportunities to provide research management support when I asked for such opportunities."

Advice for current students

Alumni were also invited to give advice to current students who are considering joining the program. Those who gave advice highly recommended the program while also advising that students should select projects they are passionate about and should then fully commit to the project in order to maximize the benefits of the experience. Specific comments are provided for further context.

"Do it. I participated in three different Bass Connections teams and they were each unique and more beneficial than any of my traditional coursework. You will gain deep knowledge in your project area in addition to broadly-applicable presentation, project management, and client communication skills that you will frequently use after graduation."

"The program works if you choose a topic you genuinely care about, open yourself up to the opportunities it provides, and completely embrace the cross-disciplinary aspects of the team."

"You get out of it what you put into it but it's possible to get some amazing, practical skills if you put in the work."

"Actively talk to the faculty and graduate students in the project on how the project might translate into a professional interest and job prospect."

"The research should align with your interests, but the mentor should also be a major factor in your choice of team."

"Anticipate that the project may evolve, and be ready to adapt - it will make the learning experience much more rewarding."

"I would advise current students to participate in Bass Connections because relative to other courses, it provides the most real-world opportunity to develop projects and collaborate with multiple stakeholders."

"When you apply to real jobs, they want to hear how you have worked on a long-term, complex project and used analytical skills. Bass Connections gives you the opportunity to do that. It also gives you the chance to build a close relationship with a world-class Duke professor (someone to write your rec letters...). It is a no brainer."

Overall reflections

Reflecting on the overall experience, alumni offered the following comments:

"I would highly recommend joining Bass Connections. It gave me hands-on experience with a career path that I was considering and am now pursuing. The connections I made with staff were very strong because of the level of engagement on my team."

"Bass Connections was one of the highlights of my college experience and I am so thankful for the chance I had to work with my mentor."

"This program encapsulates everything that is wonderful about Duke- the dedication of professors and students, research in a diverse context, and addressing critical problems in our broader society."

"Bass Connections is a great way to gain experience on a funded multi-disciplinary team. Great practical experience and provides really poignant experience to talk about in-depth during interviews. Also provides a lot of opportunities for presentations, publications, and leadership roles."

"Bass Connections is a great cross-discipline program that exposes you to people of different professional ambitions and backgrounds. Getting everyone to work towards the same goal while putting it in perspective of the bigger picture helps frame how collaborative efficiencies of diverse groups work together in new, meaningful, and, sometimes, surprising ways."

Conclusion

Bass Connections remains a relatively new program with a small but growing alumni base. This survey provides a first look at the impact of the program on the post-graduate trajectories of alumni, but it remains to be seen how alumni will reflect on their Bass Connections experience after an extended period or what path alumni will follow throughout their career. In particular, for the large number of alumni who are currently enrolled in a graduate or professional degree program, it remains unclear how their future career may relate to their Bass Connections experience.

That said, this first look at the program's alumni suggest that the program has a lasting impact on helping students uncover their interests and prepare for the post-graduation roles.