Muhlenberg College

Student Engagement in Experiential Learning Opportunities: Identifying Barriers and Solutions for Participation

Michele Moser Deegan, Ph.D.
Regina Lau '23
Jake Ghamar '23

March 31, 2023

Contact: Michele Deegan, Dean of Institutional Research, Assessment and Effectiveness at micheledeegan@muhlenberg.edu

Table of Contents

Executive Summary

This research explores engagement in experiential learning opportunities, known as high impact practices at Muhlenberg College. These practices have been found to increase learning outcomes and may also improve retention and graduation rates. The researchers asked two questions: To what extent do students engage in high impact practices; and what barriers are students experiencing that prevent them from engaging in high impact practices?

Using surveys and focus groups of college juniors and seniors, the researchers examined four high impact experiences: study away, both semester and short-term, internships, independent research and community engagement. While survey respondents were most likely to participate in community engagement and internship experiences, they identified several barriers. The most frequently cited barriers in the survey and focus groups are institutional, indicating a need to develop a more effective communication strategy about these opportunities. Students knew the least about independent research opportunities and were unclear about the study away process. Financial issues were a barrier, particularly the cost of short-term study away and the lack of payment for some internship opportunities. The COVID-19 pandemic was also a barrier to engagement as students felt the need to connect through clubs and other extracurricular activities in order to make connections and reconnect when campus fully reopened.

Introduction[1]

It has been a tumultuous period for U.S. higher education. Colleges and universities have been under continual political and social scrutiny while having to simultaneously overhaul programmatic offerings due to historically low unemployment rates and the onset of the COVID-19 pandemic. To add to these challenges, colleges have had to do more with less as they are underfunded in many states while facing a mental health crisis. The forecasted enrollment cliff has taken on a steeper slope due the confluence of these factors and declining birth rates. For example, from 2019 to 2021, the national enrollment rate for college students declined by over six percent from 69.1% in 2019 to 62.7% with significant declines for African American/Black students from 64.5% to 57.5% and from 65.4% to 56.2% for Hispanic students (NCES 2021).

The good news is that the overall 6-year graduation rate for students attending 4 year institutions has increased across all race and ethnic groups, however, the rates remain lower for students identifying as African American/Black (45.7%) and Hispanic (59.1%) compared to Asian (77.7%) or White (67.9%) identifying students (NCES 2022a). Higher education institutions also report that students receiving a Pell Grant are less likely to complete a bachelor's degree within six years (53% vs. 65.9%) (NCES 2022b). Additionally, the percentage of first-generation students who graduate from college is lower than continuing generation students across all types of institutions. The difference in graduation rates for first-generation students compared to continuing generation students is 10% for very selective institutions, 17% for moderately selective colleges, 28% for minimally selective colleges, and 23% for open-admission colleges (Startz 2022).

In order to increase the enrollment rate of low income students, at the end of last year, President Biden signed a bill that increased the Pell grant award for the 2023-24 academic year. Biden's FY 2024 Executive Budget calls for a further increase for 2024-25. Organizations such as the American Talent Initiative (ATI) are working to increase the number of low-income students enrolling in and completing bachelor's degrees at member institutions. Coalition members share ideas and information in order to meet the goals of,

---

"enrolling and graduating within 6-years, an additional 50,000 lower-income students at the 341 colleges and universities that consistently graduate at least 70 percent of their students in six years," (ATI 2023).

Across the nation, colleges employ many strategies in the hopes of enrolling a more diverse student population and increasing retention and graduation rates such as fully funding the educational experience, summer bridge programs, intrusive advising, early warning systems, and implementation of learning communities. Some of these programs are available to the larger campus student population but others are tailored to students who need a pre-college academic boost, such as a summer bridge program, or special research opportunities for students who are the focus of a particular strategic priority. Several of these high impact, experiential learning activities have been grouped into a unique set of experiences by the Association of American Colleges and Universities (AAC&U) and referred to as high-impact practices or HIPs. In 2007, the AAC&U identified the following activities as High Impact Practices: capstone courses and projects, collaborative assignments, common intellectual experiences, learning communities, diversity/global experiences, first-year seminars and experiences, internships, service learning/community-engagement, undergraduate research and writing intensive courses (Kuh 2008). EPortfolios are a more recent addition to this list, bringing the total number of high impact experiences to 11. As discussed in our literature review below, these practices have been found to increase student learning outcomes, GPA, retention and graduation rates. According to Kuh (2022), in order for an activity or course to be considered high impact, it should include the following elements: 1.) Performance expectations set at appropriately high levels, 2.) Significant investment of time and effort by students over an extended period, 3.) Interactions with faculty and peers about substantive matters, 4.) Experiences with diversity, wherein students are exposed to and must contend with people and circumstances that differ from those with which students are familiar, 5.) Frequent, timely, and constructive feedback, 6.) Periodic, structured opportunities to reflect and integrate learning, 7.) Opportunities to discover relevance of learning through real-world applications and 8.) Public demonstration of competence. While a high impact practice does not have to include ALL 8 elements, Kuh notes that the more of these elements that an experience contains, the higher likelihood of positive outcomes.

While most colleges embed at least one of these practices into their common core, such as a first year seminar or senior year project, other opportunities may be optional, allowing students to choose to engage in the experiences, or are only available to students in a particular major or specialized program. Examples of these experiences include internships, independent research, and community engagement. Unfortunately, even if students are aware of the benefits of high impact practices and would like to participate, students may encounter barriers to engage. This study contributes to the body of literature on high impact practices as it explores barriers to engagement in voluntary high impact practices, particularly for low income students and historically underrepresented students in higher education and addresses the following questions:

- To what extent do students engage in high impact practices?
- What barriers are students experiencing that prevent them from engaging in high impact practices?

In this study, we look to examine the similarities and differences of participation in these high-impact practices based on race, ethnicity, first-generation status, Pell grant recipient status, and several other demographic factors. In the following section we identify common barriers based on the review of the literature and then use these barriers to examine student tendencies.

Review of the Literature

This literature review explores the research on the benefits of high impact practices as well as the barriers to engaging in high education learning opportunities in order to develop our understanding of the reasons why students at Muhlenberg College do not participate and in order to revise strategies to increase student engagement.

High Impact Practices and Student Outcomes

For over 15 years, researchers have examined the short and long-term benefits of high impact practices, noting many positive outcomes of student engagement in these experiences. When examining the impact of these experiences, the research focuses on 4 measures: achievement of broad learning outcomes of a liberal education, grade point average, retention and

graduation rates. In drawing conclusions about these results, researchers typically note the variability in HIPs implementation across campuses as the context of implementation varies based upon each campus' unique attributes including classroom environments and levels of faculty involvement.

Most research on high impact practices suggests that there is a positive relationship between engagement in a HIP and measures of broad learning outcomes, grade point averages, retention and graduation. But even drawing this conclusion, we must recognize that even when positive relationships are found, the magnitude of the impact varies, as does the type of engagement measured. Patton (2015) is also critical of the extent to which these studies lack the perspective of critical race theory and point out that many neglect consideration of race as an indicator of interest and access. Likewise, Kinzie et al. (2020) are also critical of the research to date as there is a gap in the research regarding the extent to which HIPs deliver on the stated elements of quality and whether program quality is consistent across all experiences and equitable for all students. Mindful of these critiques, there is a growing body of research that considers issues of intersectionality and differentiating student identities.

In addition, there is variability in the sample size and research methods. The sample size of studies of HIPs ranges from several thousand students using large national survey data sets to qualitative case studies of several dozen students at one college or university. With these caveats in mind, the review of the literature discussed below synthesizes results from a sample of the studies completed with attention to studies measuring results by race, ethnicity, first-generation status and income.

Research focusing on broad student learning outcomes frequently utilizes data from the National Survey of Student Engagement (NSSE). This longitudinal survey is administered by several hundred colleges and universities each year with over 200,000 students completing surveys in 2022 (NSSE 2023). NSSE measures the extent to which students engage in a variety of college experiences, including HIPs and examines these experiences in relation to broad areas of learning, personal development outcomes and engagement with deep approaches to learning. Using these data, Kuh (2008) examined the effects on learning outcomes of five different types of high impact practices: learning communities; service learning; study abroad; student-faculty research and senior experiences. He found self-reported

increases in learning gains for all HIPs studied and for all students, with results remaining significant when students were broken out by race/ethnicity, first-generation status and sex. For example, Kuh found that seniors who assisted faculty on research projects reported significant gains in personal, practical and general learning than those not engaging. Finley and McNair's (2013) analysis of NSSE data from students at 38 institutions also found that involvement in at least one of the six HIPs studied was beneficial, particularly for students who identified as first-generation, transfer, Black/African American or Hispanic. Students identifying in these groups reported broader learning goals such as deep learning, gains in general education, practical competence and personal/social development compared to those not participating in these experiences.

Ribera et al. (2017) utilized NSSE survey results to examine students' sense of belongingness and found that first-year students who had participated in learning communities, service learning, research with faculty or campus leadership reported higher levels of connection with their institution and peers, particularly students from historically underrepresented racial and ethnic groups. Valentine et al. (2021) utilized NSSE surveys administered at 15 institutions, focusing upon measuring the relationship between learning gains and participation in six high impact practices and found that overall, there was a significant positive difference in learning outcomes for students participating in one or more experiences, particularly for African American/Black students who had higher perceived learning gains after participating in service learning or internships, however there were no significant differences when participating in other HIPs nor for other race/ethnic groups across the six activities studied.

Using a different data set from the Wabash National Study of Liberal Arts Education, Kilgo, Ezell Sheets and Pascarella (2015) examined the relationships between first-year seminars, learning communities, writing-intensive courses, collaborative learning, undergraduate research, study abroad, service learning, internships and capstone courses/experiences and seven dimensions of undergraduate learning such as integration of learning, effective reasoning and problem solving, intercultural effectiveness, leadership and critical thinking. Their results were positive and significant across learning outcomes when students engaged in collaborative learning and undergraduate research experiences but not between these outcomes and other HIP experiences.

Reviewing the literature exploring the extent to which learning outcomes increase as the number of HIPs engagement increases, Brownell and Swaner (2010) found that as HIP engagement increased learning outcomes significantly increased for first-generation and transfer students and students from racial and ethnically minoritized groups. Specifically, self-reported increases in engagement in deep learning approaches substantially increased for African American/Black, Asian and Hispanic students engaging in five or six practices compared to no HIP engagement. Finley and McNair (2013) also found that participating in multiple high impact practices had a cumulative effect on student learning outcomes. These results were consistent for first-generation students as compared to continuing generation students and for Black/African American and Hispanic students compared to White students.

Studies have also measured the effects of HIP participation and grade point average. Kuh's (2008) study utilizing NSSE data suggests that HIP engagement in the first year had a positive effect on a student's reported GPA, particularly Hispanic identifying students. Likewise, Gipson and Mitchell (2017) studied HIP engagement across multiple experiences for African American/Black students, examining levels of participation and grade point average across class years. In this study, the cumulative effect of HIPs was found as students participating in four or more HIPs had higher grade point averages.

Many scholars have investigated the importance of engagement for student retention and graduation measuring the impact of multiple HIP experiences or singular activities with mixed results. For example, when examining the impact of HIPs on first-year retention, Kuh (2008) found that students engaged in a first- year experience had a higher rate of retention, particularly Hispanic students as compared to White students. In addition to retention for first-year students, Provenchur and Kassel (2019) examined outcomes for second-year students engaging in self-selected HIPs, which were common intellectual experiences, community-engaged courses, research, study away and internships for course credit at one small Liberal Arts college in order to measure if engagement was helpful for retention. The authors found that students participating in one of these high impact practices were more likely to be retained if they identified as female, non-White, or had a high GPA. Overall, they found that 99% of students who participated in a HIP during sophomore year were retained at the end of that year compared with 87% of students who did not participate. Finally, in a case study that examined

the full college experience, Dagley et al. (2016) found that first-year retention, long-term retention and graduation rates were higher for students participating in a STEM-focused learning community than their comparison group.

Turning to examinations of the impact on graduation rates, Johnson and Stage's (2018) large longitudinal study examined the relationship between HIPs at over 200 institutions utilizing data collected at the institutional level finding no significant relationship between eight of ten HIPs in the full sample and negative relationships between two, the first-year seminar and internships, and four year graduation rates. However, when breaking institutions out by type they found that for students at least-selective institutions, the relationship between the six-year graduation rate was significantly and highly positively correlated with participating in student-faculty research. Although they also found that participating in a high impact practice did not mitigate the impact of financial ability on graduation rates as variables measuring student financial need were significant and negative across all statistical models investigated. Their analysis of institutional level data was unique to other studies examined in this review, which utilized student level data.

McDaniel and Van Jura (2022) examined data from the 2002 Educational Longitudinal Study (ELS) to measure the impact of participating in four HIPs on students' likelihood of completing college finding, in general, that participation in an internship, community engaged projects, undergraduate research or study abroad significantly increased the likelihood of graduation. They also found that African American/Black students participating in high impact practices had higher rates of retention compared to those students not engaging but they found no statistical differences in the impact of HIPs engagement and completion when analyzing students by gender, other races, ethnicity or first-generation status. As noted above, several studies have shown that even when a student participates in a similar experience multiple times there is a positive impact. For example, Larson et al. (2022) found that when students participated in one or more community engaged courses they had both higher retention rates and were more likely to graduate within 4 years.

Student Engagement Barriers

A multitude of researchers have studied college success, applying theories from many disciplinary lenses including economics, education, psychology and sociology. to inform the higher education community about factors that lead to success and suggest best practices to improve college graduation rates. Generally speaking, these studies find that students are more likely to be academically successful and graduate from college if they possess the following factors: adequate high school and college preparation and financial resources, higher levels of self esteem, are able to quickly assimilate into academic and social life and have a supportive family environment (Kuh et al. 2006). In particular, student engagement has been shown to be an important factor to college success, beyond a student's individual characteristics (Astin 1984). The best opportunity for success is when students engage within both the academic and social environments of college life. Academic engagement makes it possible for students to develop and practice deep learning strategies and other learning skills as they engage with faculty, staff and peers inside of the classroom or other academic spaces. This form of involvement may be the only opportunity for cognitive and behavioral development and connection to campus for students who have obligations outside of college (Tinto 2010). Academic engagement increases a student's sense of belongingness (Ribera et al. 2017) and may also lead a student to participate in other aspects of campus life and increase student success. Flynn's (2014) research into student engagement behaviors found a strong interactive effect between both academic and social behavior and college completion.

Unfortunately, for many students, situations arise that make engagement in academic and social life more difficult (Allen et al. 2009, Sandoval-Lucero et al. 2014).. Drawing upon research by Cross, these barriers can be separated into three categories: situational, institutional and dispositional (Cross and McCartan 1984). While Cross' work focuses on adult learning and issues of retention and graduation, this typology can be applied to examine the barriers that limit any student's engagement in college life, including high impact practices.

As defined by Cross and McCartan, situational barriers arise due to a person's personal circumstances during their education such as time limits to engage in activities due to employment or responsibilities at home, lack of money or a lack of child care for young parents. Situational barriers also

include the level of preparedness for college, which impacts a student's academic success as well as their social and cultural capital once they enter the college environment. The literature suggests that lower levels of these attributes exist for low income, first-generation or students from marginalized racial and ethnic groups as students who identify in one of more of these categories are more likely enter college lacking adequate academic preparation or knowledge of "how to college" (Balemian & Feng 2013, Sommerfield & Bowen. 2013, Sandoval-Lucero 2014). Without adequate knowledge from the start, these students must quickly learn how to engage with academic support services or peer support in order to build the skills to succeed.

There are several ways in which a student's familial situation may pose challenges to fully engage in the educational opportunities available during college. Many low income students work in order to pay for the costs of college or have to take care of family members. In addition, according to Corrigan (2003), low-income students are more likely to be older and support a family. Parents of first-generation students, although providing emotional support, lack the knowledge of how to transition to college or navigate college life (Corrigan 2003, Confrey 2021), although a study by Dennis et al. (2005) of second year racially minoritized students found no relationship between family support (resources and emotional support) and a student's GPA. Time to engage beyond the classroom is more likely to be a challenge for low income students, however, family or work are not the only responsibilities that limit a student's time. In the case of student athletes, time to engage in a high impact experience decreases due practice and athletic schedules and expectations about time commitments in preparation for the sport (Ishaq 2019). Participation in Greek life, student government, other college clubs and intramural sports may also pull students away from prioritizing engaging in high impact activities identified in the literature.

While the level of financial and academic resources and time constraints may limit engagement, dispositional traits, such as psychological attributes or socialization difficulties, may also work against student engagement. Dispositional barriers are a student's attitudes and perceptions of themselves as learners as they internalize negative stereotypes (Cross & McCarten 1984). Motivation and a student's sense of belonging are critical to persistence and degree completion but may also play a role in determining the opportunities in which a student chooses to engage. As noted by Tinto (2006-07), students

must be motivated to persist in order to graduate. Motivation may be nurtured by active engagement in academic experiences such as research, which allows students to see themselves in a new role that they may have thought unattainable. For example Graham et al. (2013) analyzed STEM research programs across several colleges and universities that were designed for students from underrepresented racial and ethnic minority groups and found that the ability of students to identify professionally as scientists increased their motivation and persistence in STEM fields of study.

Sense of belongingness on campus plays a critical role in student engagement, retention and completion just as feeling isolated encourages students to internalize negative self-worth and disconnect. As noted in the literature, many first-generation college students may feel socially and culturally isolated, which leads to lower academic achievement and higher dropout rates (Johnson et al. 2011, Pascarella et al. 2004). Students may also enter college with the belief that people like themselves, however that is defined by the student, don't belong on campus. However, when first-generation first-year students engaged in a learning community with senior college students of similar backgrounds Stephens et al. (2014) found that they had an easier transition to college and better social and academic engagement. A related study of first-generation racially minoritized students by Dennis et al. (2005) has found that peer support was an important predictor of outcomes for second year college students; students with readily available peer support from upper level students of similar backgrounds were more likely to draw upon these resources for support than seeking support from family and succeed. These findings are supported by other studies of targeted learning communities composed of students from similar racial or ethnic groups that found that students engaged in these communities had a higher sense of collectivity and belongingness and higher retention rates (Gonzales et al. 2015, Storlie et al. 2016).

Institutional barriers to engagement, retention and graduation consist of those practices and procedures that exclude or discourage students from participating in educational activities including scheduling, additional fees for participation, or course requirements for degree completion that are within the institution's control (Cross and McCarten 1984). More broadly, Tinto (2012) notes that the success of a college student is not only dependent upon their own abilities but also the institutional attributes that create a rich and inclusive learning environment. He recommends that in order for students to

meet the high expectations and standards of higher education, institutions must provide adequate and inclusive academic, social and financial support particularly during a student's first-year.

These three types of barriers to engage in HIPs are interrelated as students lacking adequate financial resources (situational) may feel disconnected to campus life, leading them to lose motivation (dispositional) to continue unless the college provides the means necessary to support engagement (institutional). Our study applies this typology as we consider barriers to engagement in high impact practices at Muhlenberg College.

Muhlenberg College

Muhlenberg College is located in Allentown, Pennsylvania. It is a small Liberal Arts college that was founded in 1848 and today offers undergraduate and graduate programs. In the 2022-2023 academic year, there are 1,871 undergraduate students enrolled, approximately 60% identify as female and 39% as male. About 11% of the total enrollment identifies as Hispanic/Latino, 3.5% as Asian, 4.4% as African American/Black, 3.7% as two or more races, and 72.2% as White. The overall 6-year graduation rate for the 2016 cohort is 82.8%, 90% for Pell grant recipients, 80.7% for students who identify as non-White and 87% first-generation college students graduating. As a Liberal Arts college, Muhlenberg offers programs in the arts, humanities, natural and social sciences, as well as in professional areas such as business, education, pre-medical, pre-theological, and pre-law studies. Flexibility is provided through course options and opportunities for independent study, research, and internships, and through a plan for self-designed majors. The culture of the college is very lively and busy academically and socially. Students keep themselves busy by engaging in clubs, sports, and other extracurricular activities. Students frequently double major or at least minor in one program of study. In addition, undergraduate students have to complete 4 HIPs embedded in the general academic requirements. These requirements are a First-Year Seminar, an Integrated Learning experience, which could be one or two courses, a senior year experience, called a Culminating Undergraduate Experience, and two additional writing intensive courses. In addition, students have the option to complete five additional high impact experiences: study abroad, MILA (Muhlenberg Integrated Learning Abroad), an internship, community engagement, and independent research. Other HIPs, such as

Learning Communities, collaborative assignments, and ePortfolios are used at the discretion of faculty.

Research Methods

This study used two methods of data collection and quantitative and qualitative analyses to understand barriers to engagement to high impact practices. This work builds upon an early study by the authors last year utilizing student level data from the 2014 Muhlenberg class cohort, which identified a relationship between engagement in HIPs and student outcomes including GPA and four and six year graduation rates. We examined participation in student selected HIPs including community engagement, independent research, internships and research separately as well as measuring total HIPs engagement. The results of this study suggested that in this sample, as student participation in high impact practices increased, GPA and likelihood to graduate increased. These effects of HIP participation were larger for low income students and students from racially and ethnically minoritized groups. With these findings in hand, we applied for support from ATI to help us discern how we could increase enrollment in these experiences, particularly for students who might see greater benefits from engagement.

<u>**Survey**</u>

Our survey was designed to measure student reported engagement in five experiences and to identify the barriers to engagement at Muhlenberg College. The practices examined are studying abroad for a semester, enrollment in a MILA course (Muhlenberg Integrated Learning Abroad), which includes a semester-long class and a shortened abroad experience, community engagement, internships and independent research. These experiences are identified as having a high impact on student learning by the AAC&U and are optional learning experiences at Muhlenberg College.

Our primary variables of interest are barriers to HIP engagement. Drawing upon our review of the literature, we identified sixteen situations that may pose barriers and broke them out in to three categories using the typology created by Cross: institutional, dispositional and institutional (Cross and McCarten 1984). The survey asked participants about engagement in each experience. If the respondent did not engage in a HIP, they were prompted with a list of potential barriers, listed in Table 1, and asked to best describe why they did not participate. Students could also provide additional responses.

They were able to select multiple barriers for each high impact practice. As shown in Table 1, situational variables include circumstances surrounding a student's decision as they considered whether to engage in a high impact practice. These include family expectations, financial or time constraints. We did not include the COVID-19 pandemic as an option at this point as we did not want it to overshadow the effects of other barriers identified in the literature. We left this option for students to write in an "other" barrier option. Dispositional barriers capture how a student perceives themselves within the educational setting. These barriers include a lack of motivation to engage, lack of peer support to engage or that other students with a similar identity don't engage in a particular experience. Institutional barriers, whether explicit or implicit, also limit access and inclusivity of engagement and include such factors as communication about opportunities for engagement, lack of institutional financial support or a culture that is not inclusive of all students to engage. In addition to questions about participation in HIPs, students were asked a series of demographic questions that we used as control variables including if a student is a first-generation college attendee, Pell grant recipient, sexual identity and disability status.

This survey (see Appendix) was emailed to all students in the classes of 2023 and 2024. The survey was anonymous and was administered using Qualtrics. It was available for completion from mid October through mid November 2022. To increase the response rate, we offered five stipends chosen at random from those who entered a raffle.

Table 1
Typology of student engagement

Situational
Family pressure to prioritize classroom experiences
Lack of parental/familial awareness to navigate engagement
Financial constraints
Time limited: need to do other things like job or childcare/family care
Time limited: too busy with classes/academic work
Time limited: too busy doing other things on campus like clubs, sports social/extracurricular

Dispositional
Not motivated to engage in activity
Lack of awareness of students with similar identity (race, sexual orientation, disability status) who has engaged in activity
Social group engagement - pressure to not engage/no peer support

Institutional
Communication about opportunities
Lack of institutional financial or administrative support
Culture not supportive of engagement for certain student groups

Focus Groups

In addition to the survey, six in-person focus groups were held in November and December 2022. Students participating in the focus groups self-identified as interested in participation after they completed the survey. In addition, because we wanted to ensure that first-generation students participated in the focus groups, the advisor for our first-generation student club sent an email to all members. This email yielded additional student engagement and we added another focus group to engage all interested students. Students participating in the focus group received a monetary stipend. Similar to the survey, students were asked to identify if they had participated or planned to participate in each of the five HIPs for this study. If they did not or were not planning to participate, the interviewers asked the students to go into detail about the barriers that they encountered for each HIP in which they were unable to participate. In addition, they were also asked about the effectiveness of the current methods of communication employed by the college, as preliminary survey results suggested college communication shortcomings, as well as ideas about how to increase participation in these practices. Because of students' high level of extracurricular engagement, we also asked them to identify how many clubs or sports they were engaged in. Finally, the participants were asked to describe the impact that the COVID-19 pandemic had on their ability to engage in these experiences as we expected a large impact but wanted to see the extent to which it was mentioned as we discussed HIPs separately before asking a more general question.

Results

As detailed further in this section, the survey and focus group results confirm that the primary barrier to engaging in high impact practices at Muhlenberg is institutional communication, specifically, the lack of effective communication about these opportunities by college administrators and faculty. Second, it appears that students are very active in extracurricular activities and have chosen to engage in these activities rather than optional high impact practices. Third, the COVID-19 pandemic overshadowed their college experience and has likely contributed to their inability or lack of willingness to participate in these activities and our ability to effectively educate and communicate with students about these experiences.

Survey Results

In total, we received 197 survey responses. After removing incomplete surveys, we used 158 responses for this analysis. As shown in Table 2, there was a somewhat even split of participants in the classes of 2023 and 2024. As reported in the summary statistics, it is clear that most students who participated were White (75.9%) but there were more students identifying as two or more races (11.1%) than other race or ethnic groups, which are higher percentages of both groups than reported for the campus as a whole.

It is also clear that there are a lot more females (73.8%) who participated in the survey than males and non-binary students. Also, the percentage of students who reported receiving a Pell grant (24.5%) is higher than the 21% rate of Pell eligible students. First-generation students made up 20.1% of our sample, which is also higher than our first-generation (17%) student population. As shown in the table, at least 50% of students completing the survey engaged with one to two high-impact practices beyond those that are embedded in our general academic requirements.

The survey data were cleaned, wrangled, and analyzed in R. Regarding our first research question, survey results reveal that the most frequent HIP that students participated in was community engagement (54.1%) followed by internships (45.2%), study abroad (43.9%), research (27.4%) and a MILA (24.8%). Community engagement and internship experiences are the most frequently identified activities for Pell grant recipients: community engagement, (62.2%) and internships (37.8%); First-generation students (60% and 36.7%); students self-identifying in an underrepresented racial or ethnic group (55.6% and 47.2%); female (54.6% and 43.7%); and if they self-identified with a disability (62.8% and 46.5%). Male identifying students are most likely to engage in study abroad (47.8%) and an internship (47.8%).

Table 2
Survey Descriptive Statistics
(n = 197)

	Valid n	Valid %		Valid n	Valid %
2023	197	48.22%	First Gen Yes	164	20.12%
2024	197	51.78%	Pell Grant Yes	163	24.54%
Asian	162	4.94%	Disability Yes	164	27.44%
Black	162	1.85%	No HIP	178	7.30%
Hispanic	162	3.70%	1 Total HIP	178	33.15%
White	162	75.92%	2 Total HIPs	178	26.97%
Two or More Race	162	11.11%	3 Total HIPs	178	20.79%
Female	164	73.78%	4 Total HIPs	178	8.99%
Non-Binary / Non-Conforming / Genderqueer	164	8.54%	5 Total HIPs	178	2.81%

Students that identify as non-binary or non-conforming or gender queer mostly engaged in study abroad (78.6%) and community engagement (71.4%). The high level of participation in community engagement may be attributable to several factors. Our Office of Community Engagement offers many opportunities to connect with our community, as early as the first semester on campus. They provide transportation to various activities and many courses have a built-in community-engagement component. Engaging in these activities requires minimal to no cost. Students can engage when they are able to fit this experience into their schedule. Additionally, as a campus community, we are committed to being good neighbors and engaged partners and build this mindset into our conversations with one another.

Survey results indicate that internships were also a popular activity. Because we offer academic credit for internships, during the regular academic year, students often engage in these experiences as a part of their typical course load. However, there is often a transportation cost associated with off-campus internships, as well as the cost of clothing in certain situations. It is possible that these barriers were removed and students were able to engage in remote internship experiences during the pandemic, saving the costs of transportation and clothing as well as the time needed to get to the internship location. Another factor influencing participation may be our newly restructured Career Center, which has transformed the way that students are connecting their academic and career goals.

Turning to the multivariate analyses of survey data, in order to address our second research question, initially we created sixteen linear regression models where the response variable or dependent variable was the total count of the number of times that a student reported engaging in a HIP. We selected the Total HIPs variable in our final estimation because results of models regressing barriers on individual HIPs proved insignificant, likely due to a low number of students identifying barriers within each type of practice. The control variables for each linear regression model were race/ethnicity, gender, sexual orientation, first-generation, Pell grant and disability status. Race was coded as '1' for students identifying as belonging to two or more races and participants who do not identify as White (e.g., African American/Black, Hispanic/Latina, etc) and participants who identify as White-only were coded as '0'. Gender was coded into three categories; male identifying students were coded as'1', female as '0', and '2' is used for students identifying as nonconforming/genderqueer/ and non-binary. Sexual orientation is coded as '1' for those identifying as straight and all other orientation options are coded as (i.e bisexual, gay, etc) as '0'. First-generation is coded as '1' if the participant is identified as first-generation and '0' if continuing generation. Pell grant is coded as '1' when the participant said that they received a Pell grant and '0' for those who did not report receiving a Pell grant. Lastly, disability was coded as '1' if the participant identified themselves as having any type of disability and '0' if they did not identify. These variables were selected as control variables based upon our review of the literature. Also, examining whether there is a statistically significant association between any of these demographic variables and HIP participation is critical to the research. In the final model specification, for each linear regression model, a

predictor variable that represents the number of times a particular barrier was selected by each participant in the survey was added to the models in our estimates of total HIPs. For example, if a student said that financial barriers prevented them from participating in multiple high impact practices, we included a count of each time this barrier was selected.

Initially, we ran the model with the 16 barriers broken-out in subsets by category (e.g., situational, disposition, or institutional) and controlling for student characteristics and found no statistically significant relationships. Decoupling the barriers from these categories and using in the model only those barriers with at least 25% of students identifying a barrier as we examined the effects on the total HIPs variable yielded more useful results. We provide results from models with statistically significant relationships in Table 3.

Overall, the results suggest that there is no relationship in these models between a student's race, ethnicity, sex, first-generation or Pell status and participating in the high impact practices examined. Although not significant, the Race coefficient is positive in our models, suggesting that non-White students were more likely to engage in a HIP than White students. The coefficients for Pell grant and First-generation variables are also not significant but negative, suggesting that students receiving a Pell grant or identified as first generation were less likely to participate in these experiences. In our sample, comparing individuals self-identifying as non-binary, non-conforming or gender-queer to female identifying students, it appears that non-binary identifying students engaged in a higher number of HIPs, on average, at Muhlenberg College. Students identifying as non-binary, non-conforming or gender-queer participated in about one additional activity, on average, holding constant all other variables. Also, there was no statistical difference between the total HIP participation of males compared to females in this sample. In addition, disability status negatively impacted participating in high impact practices as students who identified with a disability, on average, were slightly more likely to indicate that they were not interested in engaging than students who did not self-identify as having a disability.

Table 3
OLS Regression Results
DV = Total HIPS
(n=158)

	1	2	3	4
Y-intercept	2.30375 ****	2.2869 ****	2.45135 ****	2.61028 ****
Race	0.19817	0.2405	0.14942	0.21669
Disability	−0.30411	−0.2626	−0.27509	−0.44243**
First-generation	−0.20815	−0.1242	−0.20041	−0.17091
Pell Grant	−0.21017	−0.299	−0.34134	−0.21586
Gender (Male)	0.05989	0.1936	0.03725	0.01707
Gender (Non-Binary / Non-Conforming / Genderqueer)	0.90052***	0.9386***	0.91974***	0.9814***
Sexual Orientation (Straight)	−0.2428	−0.296	−0.2539	−0.28244
Lack of communication	−0.59268**	n/a	n/a	n/a
Unaware of opportunities	n/a	−0.5212**	n/a	n/a
Busy Extracurricular	n/a	n/a	−0.43653***	n/a
Not Interested	n/a	n/a	n/a	−0.37455****
Adjust R2	0.09333	0.08191	0.1157	0.1529

P-Value Significance: ** p-value < 0.05, *** p-value < 0.01, ****p-value < 0.001

Looking across the models in Table 3, it appears that no one barrier type (e.g., institutional, situational, dispositional) is impacting HIP engagement. In our models, two institutional variables are identified as significant barriers to student engagement in high impact practices as well as one situational and one dispositional. Turning to Model 1, results suggest that when controlling for student characteristics, a lack of communication about the experience with faculty advisors, other faculty or staff on average, led to lower levels of high impact engagement (p-value < 0.001). In other words, a negative coefficient suggests that students selecting this barrier were less likely to participate in an internship, independent research or study abroad experience, controlling for demographic characteristics, due to the fact that faculty and staff did not effectively communicate these opportunities to students. This result will be discussed in more detail during our analysis of our focus groups as this was a key finding of our conversations.

Results in Model 2 are similar to Model 1 as students identified that they were unaware of these (HIP) opportunities - not receiving emails or social media information about these experiences (e.g., study away, independent research, community engagement, or internship), which negatively impacted their engagement in these practices. Estimating the number of HIPs by student characteristics, this barrier meaningfully impacted participation for Pell recipients who are first-generation students, and White identifying the most as the predicted number of HIPs that they engaged in decreased by one experience, on average, compared to non Pell, continuing generation and non-White students. Connecting these results to our study last year, we found that HIP participation had positive impacts for these student groups, making this finding particularly useful in helping us to identify how to increase engagement in the future. Combined, these findings suggest that faculty and staff need to develop more effective ways to communicate these opportunities, both in person and through digital and non digital means.

The findings in Model 3 bring to light the extent to which Muhlenberg students are very engaged in campus life. With over 120 clubs, 22 athletics teams and many ad hoc engagement opportunities, students are already finding it difficult to manage course requirements and social life. The results of this model indicate that students selecting the barrier, too busy doing other things on campus, are less likely to engage in a high impact practice (p-value < 0.01). In addition to a busy extracurricular schedule, many students at Muhlenberg College choose to complete two majors or are on the pre-med

track, which led us to believe that one of the other barriers, being 'too busy with classes/academic work,' would also be significant, but it was not. Since the being 'too busy with classes/academic work' barrier was not significant, students may be making decisions about the trade-off to participate in an optional high impact practice versus giving up time for extracurricular activities, more so than choosing the trade off between extracurricular activities and coursework. Similarly to the previous barriers, the results for the calculated regression estimate 'for the too busy with extracurricular activities' barrier remained fairly consistent across different possibilities for race/ethnicity variable and first-gen status.

The last significant barrier in Table 3 was, 'not interested in the activity,' with a p-value < 0.001. This barrier fits into the dispositional category outlined in our study plan and has the lowest p-value out of all the other significant barriers. Disability status was also significant in this model suggesting a need for more research into why students who self-identified as having a disability said that they were not interested in participating in high impact practices, leading to lower participation levels for this group.

It is important for our campus to better understand the reason for the lack of interest in high impact experiences in order to determine if there are larger issues of academic motivation of which lack of interest in participation in a HIP is a symptom. As no other dispositional variable was significant (e.g., lack of peer support of others with similar identities) it may be that our lack of communication at the institutional level, to effectively identify what these experiences are and why they would be of interest to students, may have resulted in students' lack of interest in engaging in high impact practices.

Focus Group Results

A total of 61 students participated in one of six focus groups held in November and December 2022. Table 4 below provides the summary statistics for these students. The student characteristics of those participating in the focus groups differ from the student demographics of the classes of 2023 and 2024. In these class groups, 21% of students are Pell grant recipients compared to about 42% in our sample. Likewise, we had a higher percentage of first-generation students (32% vs.17%), Asian (12% vs. 3%), African American/Black (8% vs. 4%)m Hispanic (17% vs.10%) and females (82% vs. 61%) participants than are represented on our campus. Our faculty advisor for

our first-generation student club helped to recruit students, which ensured that we were including the voices of more diverse students than we found

Table 4
Focus Group Participant Student Profile (n=61)

	Percentage
Pell Yes	41.67%
Asian	11.67%
Black	8.33%
Hispanic	16.67%
White	56.67%
Two or More	5.00%
Declined	1.67%
Female	81.67%
FG Yes	31.67%

participating in our survey.

The focus group protocol (see Appendix) was designed to parallel the survey questions and provided for more in-depth discussion about engagement in high impact practices. Additionally, the focus group protocol asked participants questions about campus communication about these opportunities, their level of engagement in extracurricular opportunities and the extent to which the COVID-19 pandemic influenced their college experiences. Two student research assistants led the focus groups; one acted as a note taker and time keeper while the other led the conversation. In addition, the focus groups were recorded and transcribed for analysis purposes. All participants signed informed consent forms before participating and received an $80 stipend. The focus groups ranged in time from 90 to 120 minutes and from 6 to 15 participants, who were either juniors or seniors.

Before digging into questions about their engagement in high impact practices we first asked students how they hear and learn about co-curricular opportunities such as study away, internships and independent research. The

most frequently reported ways in which students said that they learned about these activities was through emails, faculty or staff announcements in class or office hours, or social media and word of mouth from other students. While our campus Office of Global Education hosts a study abroad fair and Student Life hosts a student activities fair each fall, very few students said that they learned about opportunities for high impact experiences by attending these events. Likewise, although fliers advertising a myriad of events and programs for student engagement are located at the entrances to all of our buildings, only a few students said that they learned about an experience through a posted flier. Of the social media outlets used to communicate opportunities, students reported that they pay attention to Instagram accounts or use FaceBook accounts that are managed by the college. More frequently, students pay attention to posts and reposts by friends to learn about events and opportunities.

While several students reported learning about opportunities through college emails, in each of the focus groups a conversation about our college-wide use of emails to students provided the context for understanding why institutional communication is a barrier to student engagement in high impact practices as well as engagement in other co-curricular opportunities. At Muhlenberg, there is no single line of communication to students about these opportunities. Instead, email communication comes from multiple college offices, faculty and staff, and often multiple messages are sent per day. As one student said, "Sometimes we get overwhelmed with the emails, so it can be very hard. Like I know I try to check my emails but it sometimes can be a little overwhelming, just like inbox fatigue." Another student echoed this response stating, they, "usually bombard us with like a couple of emails or no emails until like the day of something which is like, I really don't think effective." We asked our Office of Information Technology to provide us with the number of emails that a typical student receives from an @muhlenberg.edu address. With 26 weeks of the academic year complete, the results suggest that a typical first-year student receives about 23 emails per week from users with this address compared to 47 emails per week for a junior. These numbers do not include emails from our Canvas, Workday or classroom specific software sites. Not only is the frequency of emails problematic but so too is what we are communicating. For example, a student noted that often the subject line of emails is vague so it isn't clear why a student should open an email and read it when inundated with so many to read. In these conversations, students

reported missing deadlines to study abroad or apply for research opportunities because this information was embedded in an email instead of in the subject line or top of the message. When students do open some of these emails, they may not understand what is expected of them even after reading the message or why they are being asked to engage in an event or opportunity. Furthermore, there were conversations about the Muhlenberg website and how it does not display up to date information about opportunities for research.

What seems to help to get information out is the reposting of important information on social media sites, particularly Instagram and Facebook as well as faculty explicitly discussing an opportunity in class, office hours or during academic advising. One student noted, "Seeing it on another platform kind of helps to solidify like, oh yea, wait, there's something going on." Several students noted that learning about research was mostly through word of mouth from faculty and friends. In general, students said that if there was something that the college wants to promote, we do a poor job getting the word out.

The focus group leader next went through each high impact practice for this study and asked students to identify if they had participated in each activity, faced some barriers when engaging or if not engaging, why.

In general, the focus group results parallel the barriers identified in the quantitative analysis with the institutional barrier of communicating with students identified as the leading barrier to engagement across all engagement discussions.

Study Abroad/MILA

Students at Muhlenberg College have the opportunity to engage in traditional semester-long study away programs as well as short-term experiences, known as MILAs (Muhlenberg Integrated Learning Abroad) in which a student enrolls in a course on campus, visiting a location once the formal semester ends. Students are able to apply their financial aid to the traditional study away experience but must incur the costs of a passport, visa and any pre arrival health costs in addition to transportation to and from the study site. We also host two domestic study away experiences in Washington DC and New York City. The cost of a MILA trip is not covered by financial aid. Students must pay out of pocket for these experiences, which range from about $2,500 for a trip to Costa Rica to over $4,000 to travel to Bangladesh. Prior to

the COVID-19 pandemic, over 50% of graduating students participated in a study away experience.

Results suggest that many more focus group participants than expected, based on our survey results, said that they had or planned to study away for a semester. Of those identified, institutional barriers were most frequently mentioned by participants, particularly a lack of communication about the financial costs, process to participate and lack of understanding of course selection even from those who planned to study away from campus. For example, confusion about study away and how it fit into students academic plans was the theme of many conversations. In addition, those who planned to not engage were most likely to cite the fact that they were double majors or on the pre-med track, as their reasoning for not being able to take a semester away from campus as it might delay graduation. Several students also cited that there were no courses that they could take to meet their major requirements as the reason to not participate and one thought that no courses would transfer. While it is possible that a student would not receive credit for courses toward their major, courses often satisfy general academic requirements or if not, are used as elective credit counted towards their total course unit requirements. Clearly there is a misunderstanding about how students can study away and still graduate within their four-year expected graduation date. It is also possible that students also might have declared majors later than usual due to the loss of critical conversations and connections when we moved to a remote learning, which forced them to focus on major completion when they returned to a full campus experience and the inability to have major courses transfer from study away programs.

The situational barrier of cost of study away was noted by participants, with a few specifically reporting that the deposit cost of $300, up to a full year prior to travel, prevented them from applying. There was also confusion about financial aid, with one student noting, "we don't get a lot of information on how much the program is going to cost and what (course) will transfer." Another barrier to engagement was the COVID-19 as students mentioned that they wanted to stay on campus; that they had missed so much time away from their full college experience due to the pandemic. Summing up these conversations, one student commented, "I chose not to do it because I was barely here on campus." Muhlenberg College, like many campuses, switched to virtual classes in March 2020 and most current seniors did not return to a full campus experience until January 2021, as sophomores. Juniors in our study

started their college experience without upper level students during their first semester on campus in Fal 2020. In addition to virtual courses, we also had to communicate about available high impact opportunities remotely, instead of in-person, which might've impacted their early understanding of the process for participation in these activities. Study away options were also not available again until Spring 2021, with a fuller range of opportunities not available until Fall 2022, when many focus group participants were seniors and no longer interested or able to engage in this opportunity. In addition to wanting to not miss out on socialization, several students also said that they were concerned about their health and safety if they were abroad during the pandemic. Only one student mentioned that study away was not inclusive for first-generation college students and one reported that they were just not interested in this experience without further explanation.

Not surprisingly, the situational factor of financial concerns was the biggest barrier to engaging in a MILA. Students noted the cost of the trip, including having to cover some meals, in addition to the stated costs. Also, several students participating in MILAs reported that costs were added to the trip after students had registered, forcing them to incur additional expenses. Many recognized that going abroad for a semester was cheaper for their bottom line than a two or three week MILA experience, "A MILA didn't seem worth it because you have to pay more for a MILA." Several participants again cited that these courses "don't fit with what I have for my majors." In addition, travel to the MILA sites takes place after the semester ends, when many students typically go home to work explaining why one student noted, "I wouldn't want to sacrifice work, cut into my internship, by doing a MILA." Unfortunately, one MILA was also canceled because the country of focus was not yet open to visitors, which impacted focus group responses. Again, one student felt that these experiences weren't not inclusive for first-generation students. Several students also mentioned institutional barriers such as a lack of understanding of what a MILA is or indications that our web pages about MILAs are out of date.

Internships

Focus group participants were next asked about participating in an internship experience. At Muhlenberg, students are able to register for an internship credit, which may count towards a student's major requirements or if not, as an elective credit. When students register for an internship for credit,

a faculty member acts as a mentor during the experience and requires that the student maintains a reflection journal or assigns another academic requirement to receive credit for the experience. During the summer months, students enrolled in an internship for credit must pay a fee for the faculty mentorship. During the academic year, this course is a part of their typical load of 4-5 courses. While several focus group participants indicated that they had completed internships, far fewer than expected reported engaging in this experience given our survey results. Of the barriers mentioned by our participants the most frequently discussed are categorized as situational, in the form of financial constraints, as well as the institutional barrier of a lack of clear information from the campus about these opportunities. Regarding the issue of unpaid internships, which are frequently available, students noted that they needed to make money to pay for their cost of living and could not engage in an unpaid internship. A few said that unpaid labor was unacceptable or did not want to pay the College for summer internship credit. Several students also said that they are using their extracurricular engagement to build soft skills and leadership capacity. For example, one student is getting the most out of their college experience through "student leadership, things that I find to be enriching and I'm paying already for the ability to have time to do those things."

Of the focus group participants, the most frequently cited barrier beyond the potential financial cost, is a lack of helpful institutional communication and information about internships. While several noted that they received emails either through the Career Center or faculty, they indicated that they didn't know what next steps to take to get started, with several feeling that the process of getting an internship, "seems very overcomplicated." We do utilize the Handshake system at Muhlenberg but use of this site was only mentioned by one student. As one student explained their experience, "So for me, I guess I didn't really know how to do it either. I just never did one. I also didn't know what it would be like." Another student felt that her identity was a barrier to getting institutional support noting, "But basically, what I'm trying to say is that not only being first gen but being Latina, there's a lot of barriers to finding an internship…" Several students also mentioned that they had difficulty finding internships related to their majors, having a, "hard time when it comes to the actual search stage." Several students also noted that there were no internships available in their major or that they had no time in their schedule to engage. As is the case with study away, it is possible that much of the

confusion about internships is due to the fact that the COVID-19 pandemic interrupted opportunities for students to start the process of locating an internship early enough in their college experience to be able to engage. Left with mostly remote communication to this group of students at a key moment in their early college experience and with the departure of several Career Center staff during the height of the pandemic, it is very possible that communication with students was impacted, causing a lingering feeling to disconnect from this experience when they returned to campus.

Independent Research

Of the students participating in our focus groups, independent research was the least frequently reported HIP activity. These opportunities are typically available to students who have met the minimum research skill requirements for their discipline of study. Students can engage in independent research during the academic year for credit and we also have numerous opportunities for summer research. Students who successfully apply for these summer experiences are paid, earn a course credit for the research, receive a stipend and campus housing. Faculty serve as mentors for student research.

Once again, the institutional barrier of a lack of information was the top reason that students did not engage in independent research. In fact, in one 15-person focus group, all students said that they lacked information about this HIP. One student incorrectly thought that research was, "only for STEM students". Other reasons mentioned as why they did not participate include that research was not an option for their major, they had no time or no interest. One student summed up the remarks of several students who felt that, "..outside of a sort of niche of understanding, it's (research) is completely inaccessible and just not even talked about, which is awful because research is awesome and there's so many different kinds." While another mentioned, "..so for science, you kind of go out of your way and it's awesome." Unlike the discussion of other HIPs, there was a clearer distinction between students who knew about research opportunities and those who did not. Students in STEM fields talked about science faculty opening their labs for students to tour and learn about these opportunities or spoke about this opportunity during class. Non STEM students were more likely to feel that this experience was limited and only for those singled out by faculty.

Community Engagement

The final HIP discussed during the focus groups was community engagement. At Muhlenberg, students can participate in dozens of experiential learning opportunities in the Allentown community. These experiences are managed through the Office of Community Engagement. Faculty may also teach community-engaged courses. Many clubs and student organizations also work with community partners. Most students in our focus groups indicated that they had participated in a community engagement activity at some point during their enrollment, which aligns with our survey results. For those who spoke of barriers to participation, a few mentioned that they lacked enough information to engage, while several said that they chose to study away or conduct independent research instead. Several students mentioned that they either needed to work or had no time due to classes. A few also expressed no interest in this activity.

COVID-19

We also wanted to get a better understanding of how the COVID-19 pandemic impacted their college experiences and engagement in high impact practices. As noted above, the students participating in the focus groups either had their first or second year very disrupted by the pandemic as they had to leave campus and engage remotely in academic and college life, or as first-year students, entered college with a few upper level students serving as Residential Advisors and very little on campus in-person interactions, including in the classroom. As expected, COVID-19 overshadowed nearly their entire college experience thus far. Attending college remotely created feelings of disconnection and disappointment as students knew that they were missing out on the full college experience, such as engaging in these experiences. Once they returned to campus, many students felt the need to engage with other students on campus, joining clubs and organizations to connect or reconnect. When we asked students how many clubs on campus they belonged to, responses ranged from 2-8, with most students engaged in 3 clubs or organizations. As we found in the quantitative analysis, being busy with extracurriculars was negatively related to engaging in a high impact practice. Muhlenberg students pre pandemic were always heavily engaged in these activities, however, it is difficult to know whether there is now a more intense level of engagement, for example, students believing that they can't miss any opportunity to participate, (i.e., leave campus for an extended period) because

these clubs have become so vital to their ability to form connections. Perhaps students are leaning into social engagement more than curricular or co-curricular engagement opportunities due to their loss of connectivity during the height of the pandemic and making the trade-off to engage less in academically-focused high impact practices, particularly if we are not adequately communicating why these experiences are important for their academic success and social development.

Student Suggestions to Increase Engagement

The final conversation during the focus group was to seek their recommendations about how to overcome the barriers that they described. Not surprisingly, students most often made suggestions about ways for campus faculty and administrators to more effectively communicate information with students. Results from this study suggest that our current approach, which is to throw spaghetti at the wall and see what sticks, is not working. While web pages exist for all activities discussed, only one student mentioned visiting these pages for information, which suggests a need to examine the analytics for our site. Hanging fliers around campus also does not appear to be an effective way to get students engaged. Instead of website revisions, one student recommended a centralized location, such as using our Learning Management System, Canvas, as an information hub about engagement opportunities. We already utilize Canvas beyond the classroom when students are new to campus. New students must use Canvas to view important education videos and read documents in order to move into housing. Following the first semester, this Canvas site is not utilized, even though we require students to use it to on-board. Making better use of Canvas and tailoring the site to each class could be a good way to provide more transparency and information about high impact practices that students are looking for. Another student suggested the desire to use a listserv or some way to only get emails that are essential to register for classes, or health and safety. Choosing by interest area (e.g. interest in study abroad, book club, etc) to cut down on the in-box fatigue, was discussed.

The second recommendation relates to the fact that students specifically wanted more transparency about the costs of study away programs, including information about the process of being approved to enroll in a MILA class. The third recommendation is to increase social media use, such as Instagram, to solidify the need to check out opportunities available. The fourth student

recommendation was to increase faculty and staff conversations with students in classrooms and during office hours, advising and other student meetings. We know from the literature that conversations with faculty and staff increase students' feelings of belongingness, which leads to better student outcomes. Our focus group results suggest that some students did hear about some of these opportunities from some faculty, particularly independent research opportunities, but these conversations were not consistent across all disciplines. Educating faculty about the need to discuss opportunities for community engagement, study abroad, internships and independent research in their classrooms and other student interactions is a vital piece to increasing student engagement in high impact practices. Administers working with students also need to reinforce education about these experiences.

Beyond communication, students made other recommendations to increase engagement in high impact practices. Because of the costs of study away, students in all focus groups discussed the need to provide more scholarships for the MILAs in particular, as the cost of travel can not be included in financial aid awards. Of the five HIPs studied, study abroad was cited as the engagement that students in the focus groups wished that they had done but hadn't been able to. A similar suggestion was made for unpaid internships, particularly in the summer months when students need to work for pay. Additionally, recommendations to increase internships participation were for our staff to do a better job connecting students to employers. As one student put it, "Stop assuming that we have connections to these big corporations like Goldman Sachs and Morgan Stanley, you know, because not every, not all of us do."

Discussion and Conclusion

The findings from this study will be useful for college administrators and faculty as we seek to increase participation in voluntary high impact practices. The survey results suggest that there is no statistically significant relationship between a students' race/ethnicity, income status, gender, sex or first generation college status and their participation level high impact practices. Survey results suggest that students on our campus are engaging in several high impact practices, most notably community engagement, internships and study away for a semester. However, the number of optional experiences that a student engages in is impacted more by institutional barriers rather than a student's situational or dispositional factors. Clearly, the COVID-19 pandemic

influenced our results. Looking across the results from the survey and focus group combined they suggest a need to address institutional barriers to engagement as COVID becomes endemic.

Most importantly, these results suggest a need for the review and revision of our communication strategy if we are to increase enrollment in high impact practices. This can be accomplished through better utilization of our Learning Management System, Canvas, as well as college social media sites. The results also support the need for more consistent communication about these opportunities by faculty and staff. Faculty need to educate students about high impact practices and how they fit into a student's educational experience while balancing students' desire to engage in extracurricular opportunities. These conversations can occur in the classroom, office hours, during advising and in informal spaces. Student-facing staff should also be better informed about how students can take advantage of opportunities and discuss them with students. Because participation in extracurricular activities was negatively related to engagement in a high impact practice, these conversations must include discussions of time management and students' broader educational goals.

Situational factors such as financial constraints and time were factors that impacted students' willingness to engage in summer internships, in particular, as well as enrollment in a MILA, which has a higher cost than semester study away and typically impacts the potential for lost wages in the summer. Finding ways to overcome the financial burden of these experiences will likely lead to increased student participation, particularly once a more effective communication strategy is in place.

Dispositional factors of motivation or feelings of belongingness were largely not found to impact students' engagement in a high impact practice. While a few students noted that they were not interested in a particular experience, there was not a noticeable pattern of this response aside from students who self-identified in the survey as having a disability. This result requires further investigation. Only one student in a focus group mentioned feeling a lack of ability to participate due to their ethnicity and status as a first-generation student even though the focus groups were over represented by students identifying as first-generation or from a racial or ethnically minoritized group.

In conclusion, the results of this study point to a positive trend towards engagement in high impact practices for those students who could benefit the

most from these experiences. The interest is clearly present. If we can figure out how to more effectively communicate about these experiences, and find ways to support them financially to do so, we will not only achieve our college's strategic goals but most importantly, help students to engage in a more fulfilling college experience and achieve their individual aspirations.

Bibliography

Allen, W.R., Kimura-Walsh, E. & Griffin, K.A. (2009). Introduction.Towards a Brighter Tomorrow: The College Barriers, Hopes and Plans of Black, Latinoa and Asian American Students in California (Research on African American Education) Information Age Publishing.

American Talent Initiative. (2023). What we do. https://americantalentinitiative.org/, accessed March 22, 2023.

Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel, 25(4)*, 297–308.

Balemian, K., & Feng, J. (2013). First-generation students: College aspirations, preparedness and challenges. College Board. Retrieved from https://files.eric.ed.gov/fulltext/ED563393.pdf March 9, 2023.

Brownell, J.E. & Swaner, L.E. (2010). 5 High Impact Practices, Research on Learning, Outcomes, Completion and Quality. Association of American Colleges and Universities.

Conefrey, T. (2021). Supporting FirstGeneration Students' Adjustment to College With HighImpact Practices. *Journal of College Student Retention: Research, Theory & Practice* 23(1) 139–160.

Corrigan, M.E. (2003). Beyond Access: Persistence Challenges and the Diversity of Low-Income Students. *New Directions for Higher Education* 121.

Cross, K. P., McCartan, A.M. (1984). Adult Learning: State Policies and Institutional Practices. ASHE-ERIC Higher Education Research Report No. 1. Association for the Study of Higher Education.; ERIC Clearinghouse on Higher Education, Washington, D.C.

Dagley, M.,Georgiopoulos, M., Reece, A. & Young, C. (2016). Increasing Retention and Graduation Rates Through a STEM Learning Community. *Journal of College Student Retention: Research, Theory & Practice* 18(2),167–182.

Dennis, J.M.,Phinney, J.S. & Chuateco, L.I. (2005). The Role of Motivation, Parental Support, and Peer Support in the Academic Success of Ethnic Minority First-Generation College Students. *Journal of College Student Development* 46(3), 223-236.

Finley, A. & McNair, T. (2013). Assessing Underserved Students' Engagement in High-Impact Practices. Association of American Colleges and Universities.

Finley, A. (November 2019). A comprehensive approach to assessment of high-impact
practices (Occasional Paper No. 41). National Institute for Learning Outcomes Assessment (NILOA).University of Illinois and Indiana University.

Flynn, D. (2014). Baccalaureate Attainment of College Students at 4-Year Institutions as a Function of Student Engagement Behaviors: Social and Academic Student Engagement Behaviors Matter. *Research in Higher Education* 55, 467–493.

Gipson, J., & Mitchell, D., Jr. (2017). High-impact practices and academic achievement for African American college students. *Journal Committed to Social Change on Race and Ethnicity*, 3(2), 124-144.

Gonzales, S.M., Brammer, E.C. & Sawilowsky, S. (2015). Belonging in the Academy: Building a "Casa Away From Casa" for Latino/a Undergraduate Students. *Journal of Hispanic Higher Education* 14(3) 223–239.

Graham, M.J., Byars-Winston, Frederick, J., A., Hunter, A.B., & Handelsman, J. (2013). Increasing Persistence of College Students in STEM. *Science* 341(6)1455-1456.

Ishaq, F.J. (2019). High Impact Educational Practices and the Student Athlete Experience: The Implementation and Barriers of HIPs in the Student Athlete Support Setting. *Journal of Issues in Intercollegiate Athletics* 12,178-204.

Johnson, S.E., Richeson, J. A. & Finkel, E. J. (2011). Middle class and marginal? Socioeconomic status, stigma, and self-regulation at an elite university. *Journal of Personality and Social Psychology* 100(5) 838-852.

Johnson, S.R. & Stage, F.K. (2018). Academic Engagement and Student Success: Do High-Impact Practices Mean Higher Graduation Rates? *The Journal of Higher Education* 89(5), 753-781.

Kilgo, C.A., Ezell Sheets, J.K. & Pascarella, E.T. (2015). The link between high-impact practices and student learning: some longitudinal evidence. *Higher Education* 69, 509–525.

Kinzie, J., McCormick, A.C., Gonyea, R.M., Dugan, B. & Silberstein, S. (November 2020). Initial Report on Project Findings Submitted to Lumina Foundation. Assessing Quality and Equity in High-Impact Practices: Comprehensive Report.

Kuh, G.D., Kinzie, J., Buckley, J.A., & Bridges, B.K. (July 2006). What Matters to Student Success: A Review of the Literature Commissioned Report for the National Symposium on Postsecondary Student Success: Spearheading a Dialog on Student Success. American Council on Education, John C. Hayek Kentucky Council on Postsecondary Education.

Kuh, G.D. (2008). High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter. Association of American Colleges and Universities.

Kuh, G.D. (2022). Afterword. In Delivering on the Promise of High-Impact Practices : Research and Models for Achieving Equity, Fidelity, Impact, and Scale. Zilvinskis, J., Kinzie, J., Daday, J., O'Donnell, K. & Vande Zande, C. (Eds). (2022). Stylus Publishing.

Larson, K. C., Downing, M. S., Nolan, J., & Neikirk, M. (2022). High Impact Practices Through Experiential Student Philanthropy: A Case Study of the Mayerson Student Philanthropy Project and Academic Success at Northern Kentucky University. *Journal of College Student Retention: Research, Theory & Practice*, 24(3), 832–855.

McDaniel, A. & Van Jura, M. (2022). High-Impact Practices: Evaluating Their Effect on College Completion. *Journal of College Student Retention: Research, Theory & Practice* 24(3) 740–757.

NSSE Quick Facts. (2023). Center for Postsecondary Research, Indiana University School of Education. https://nsse.indiana.edu/nsse/about-nsse/index.html date accessed March 21, 2023.

Patton, L.D. (2015). Disrupting Postsecondary Prose. *Urban Education* 51(3) 315-342.

Pascarella, E.T., Pierson, C.T., Wolniak, G.C. & Terezini, P.T. (2004). First-Generation College Students: Additional Evidence on College Experiences and Outcomes.
The Journal of Higher Education 75(3) 249-284

Provencher, A., & Kassel, R. (2019). High-impact practices and sophomore retention. Examining the effects of selection bias. *Journal of College Student Retention: Research Theory & Practice 21*(2), 221-241.

Ribera, A.K., Miller, A.L., & Dumford, A.D.(2017).Sense of Peer Belonging and Institutional Acceptance in the First Year: The Role of High-Impact Practices. *Journal of College Student Development* 58(4),545-563.

Sandoval-Lucero, E., Maes, J.B., & Klingsmith, L. (2014). African American and Latina(o) community college students' social capital and student success. *College Student Journal* 48(3), 522-533.

Sommerfield, A.K. & Bowen, P. (2013). Fostering Social and Cultural Capital in Urban Youth: A Programmatic Approach to Promoting College Success. Journal of Education 193(1), 47-55.

Stephens, N.M., Hamedani, M.G., & Destin, M. (2014). Closing the Social-Class Achievement Gap: A Difference-Education Intervention Improves First-Generation Students' Academic Performance and All Students' College Transition. *Psychological Science* 25(4), 943–953.

Storlie, C.A., Mostade, S.J. & Duenyas, D. (2016). Cultural Trailblazers: Exploring the Career Development of Latina First-Generation College Students. *The Career Development Quarterly* 64(4), 304-317.

Startz, D. (2022, April 25). First-generation college students face unique challenges. Brookings.https://www.brookings.edu/blog/brown-center-chalkboard/2022/04/25/first-generation-college-students-face-unique-challenges/, accessed on March 23, 2023.

Tinto, V. (2006-2007). Research and Practice of Student Retention: What Next? *Journal of College Student Retention* 8(1),1-19.

Tinto, V. (2010). From Theory to Action: Exploring the Institutional Conditions for Student Retention. *Journal of College Student Personnel* 25(4), 297–308.

U.S. Department of Education, National Center for Education Statistics. (2021). Integrated Postsecondary Education Data System (IPEDS), Spring 2010 and Spring 2021, Fall Enrollment component. See Digest of Education Statistics 2021, table 306.10; and Digest of Education Statistics 2015, table 306.10 https://nces.ed.gov/programs/digest/d21/ accessed March 21, 2023.

U.S. Department of Education, National Center for Education Statistics. (2022a). IPEDS, Winter 2021–22, Graduation Rates component (provisional data). Number of full-time, first-time degree/certificate-seeking undergraduate students in the adjusted cohort, number of completers, and graduation rate at Title IV institutions, by control of institution, level of institution, and type of aid received: United States, cohort years 2015 and 2018 https://nces.ed.gov/ipeds/TrendGenerator/app/build-table/7/20?cid=52, accessed March 21, 2023.

 U.S. Department of Education, National Center for Education Statistics. (2022b). IPEDS, Winter 2021–22, Graduation Rates component (provisional data).https://nces.ed.gov/ipeds/Search?query=query2=&resultType=all&page=1&sortBy=date_desc&overlayTableId=32473 accessed March 21, 2023.

Valentine, J., Price, D., & Yang, H. (2021). High-Impact Practices and Gains in Student Learning: Evidence from Georgia, Montana, and Wisconsin. Lumina Issue Paper. *Lumina Foundation.*

Appendix
Survey

Thank you for participating in this important study. We are interested in knowing about experiences that you have engaged in outside of the classroom that connect your academic experiences to experiential learning. We would like to increase the number of students participating in these high impact experiences. This survey is a starting point for us to understand barriers, or reasons why students have not participated in these opportunities. The study is funded by a grant from the American Talent Initiative. This survey will take approximately 5-7 minutes to complete. The information is anonymous and the survey is voluntary. Individual data will not be identified or shared, rather we will analyze and report the data in aggregate according to demographic characteristics (e.g., race, ethnicity, gender, class year, etc.). Follow the link at the end of this survey to enter into a raffle for a $100 prize. If you have any questions about this survey please contact Dean Michele Deegan at micheledeegan@muhlenberg.edu.

Of the following list, please identify what opportunities you have engaged in, or plan to engage in while a student? Check all that apply.

Study Abroad for a semester

MILA (Muhlenberg Integrated Learning Abroad)

Internships for academic credit or within a formal internship program at your place of employment

Community Engagement (Attending/working with organizations and individuals on a consistent basis)

Independent Research for academic credit or through a research organization with a formal research assistant program

Resident Assistant (RA)

Scholars Programs (e.g., Dana, Emerging Leaders, Muhlenberg Scholars,RJ Fellows, Shankweiler)

Off all of the reasons why you might not have participated in study abroad, listed below, please choose your **top** reason.

Lack of financial support from the college (e.g., expenses needed to engage in the experience (e.g., cost of travel, appropriate clothing))

Lack of communication about the experience with faculty or staff

Unaware of certain opportunities - not receiving emails or social media information about experience Don't know how to get started/who to talk to

It will be difficult to complete degree/major on time if I engage in this activity Family members are unaware of the opportunities

Do not know how these opportunities would benefit me

Financial pressure to support family

Need to do other things like job or childcare/family care

Too busy with classes/academic work

Too busy doing other things on campus - like clubs, sports - social/extracurricular Not interested in participating in this activity

I don't know anyone who has engaged in this experience

Family pressure to not engage in experiences outside of classroom learning No one like me participates in this experience

Social pressure to not engage/lack peer group support

Other (Please Specify)

Please detail other reasons you did not participate in study abroad

Off all of the reasons why you might not have participated in MILA, listed below, please select your **top** reason.

Lack of financial support from the college (e.g., expenses needed to engage in the experience (e.g., cost of travel, appropriate clothing))

Lack of communication about the experience with faculty advisors, other faculty or staff

Unaware of certain opportunities - not receiving emails or social media information about experience Don't know how to get started/who to talk to

It will be difficult to complete degree/major on time if I engage in this activity

Family pressure go to class and/or not engage in experiences outside of the classroom Family members are unaware of the opportunities

Do not know how these opportunities would benefit me

Need to do other things like job or childcare/family care

Too busy with classes/academic work

Too busy doing other things on campus - like clubs, sports - social/extracurricular Not interested in participating in this activity

I don't know anyone who has engaged in this experience

No one like me participates in this experience

Social pressure to not engage/lack peer group support

Other (Please Specify)

Please detail other reasons you did not participate in MILA

Off all of the reasons why you might not have participated in an internship, listed below, please select your **top** reason.

Lack of financial support from the college (e.g., expenses needed to engage in the experience (e.g., cost of travel, appropriate clothing))

Lack of communication about the experience with faculty advisors, other faculty or staff

Unaware of certain opportunities - not receiving emails or social media information about experience Don't know how to get started/who to talk to

It will be difficult to complete degree/major on time if I engage in this activity

Family pressure go to class and/or not engage in experiences outside of the classroom Family members are unaware of the opportunities

Do not know how these opportunities would benefit me

Need to do other things like job or childcare/family care

Too busy with classes/academic work

Too busy doing other things on campus - like clubs, sports - social/extracurricular Not interested in participating in this activity

I don't know anyone who has engaged in this experience

No one like me participates in this experience

Social pressure to not engage/lack peer group support

Other (Please Specify)

Please detail other reasons you did not participate in an internship

Off all of the reasons why you might not have participated in community engagement opportunities, listed below, please select your **top** reason.

Lack of financial support from the college (e.g., expenses needed to engage in the experience (e.g., cost of travel, appropriate clothing))

Lack of communication about the experience with faculty advisors, other faculty or

staff

Unaware of certain opportunities - not receiving emails or social media information about experience Don't know how to get started/who to talk to

It will be difficult to complete degree/major on time if I engage in this activity

Family pressure go to class and/or not engage in experiences outside of the classroom Family members are unaware of the opportunities

Do not know how these opportunities would benefit me

Financial pressure to support family

Need to do other things like job or childcare/family care

Too busy with classes/academic work

Too busy doing other things on campus - like clubs, sports - social/extracurricular Not interested in participating in this activity

I don't know anyone who has engaged in this experience

No one like me participates in this experience

Social pressure to not engage/lack peer group support

Other (Please Specify)

Please detail other reasons you did not participate in community engagement

Off all of the reasons why you might not have participated in independent research, listed below, please select your **top** reason.

Lack of financial support from the college (e.g., expenses needed to engage in the experience (e.g., cost of travel, appropriate clothing))

Lack of communication about the experience with faculty advisors, other faculty or staff

Unaware of certain opportunities - not receiving emails or social media information about experience Don't know how to get started/who to talk to

It will be difficult to complete degree/major on time if I engage in this activity

Family pressure go to class and/or not engage in experiences outside of the classroom Family members are unaware of the opportunities

Do not know how these opportunities would benefit me

Financial pressure to support family

Need to do other things like job or childcare/family care

Too busy with classes/academic work

Too busy doing other things on campus - like clubs, sports - social/extracurricular Not interested in participating in this activity

I don't know anyone who has engaged in this experience

No one like me participates in this experience

Social pressure to not engage/lack peer group support

Other (Please Specify)

Please detail other reasons you did not participate in independent research

Off all of the reasons why you might not have become an RA, listed below, please select your **top** reason.

Lack of financial support from the college (e.g., expenses needed to engage in the experience (e.g., cost of travel, appropriate clothing))

Lack of communication about the experience with faculty advisors, other faculty or staff Unaware of certain opportunities - not receiving emails or social media information about experience

Don't know how to get started/who to talk to

It will be difficult to complete degree/major on time if I engage in this activity

Family pressure go to class and/or not engage in experiences outside of the classroom Family members are unaware of the opportunities

Do not know how these opportunities would benefit me

Financial pressure to support family

Need to do other things like job or childcare/family care

Too busy with classes/academic work

Too busy doing other things on campus - like clubs, sports - social/extracurricular Not interested in participating in this activity

I don't know anyone who has engaged in this experience

No one like me participates in this experience

Social pressure to not engage/lack peer group support

Other (Please Specify)

Please detail other reasons you did not become an RA

Off all of the reasons why you might not have participated in a scholars program, listed below, please select your **top** reason.

Lack of financial support from the college (e.g., expenses needed to engage in the experience (e.g., cost of travel, appropriate clothing))

Lack of communication about the experience with faculty advisors, other faculty or staff

Unaware of certain opportunities - not receiving emails or social media information about experience Don't know how to get started/who to talk to

It will be difficult to complete degree/major on time if I engage in this
activity

Family pressure go to class and/or not engage in experiences outside
of the classroom Family members are unaware of the opportunities

Do not know how these opportunities would benefit me

Financial pressure to support family

Need to do other things like job or childcare/family care

Too busy with classes/academic work

Too busy doing other things on campus - like clubs, sports -
social/extracurricular Not interested in participating in this
activity

I don't know anyone who has engaged in this experience

No one like me participates in this experience

Social pressure to not engage/lack peer group support

Other (Please Specify)

Please detail other reasons you did not participate in a scholars program

Block 3

Check all of the boxes below that apply that identify other ways that you
are engaged on campus.

Member of a sports team

Member of a fraternity or sorority

Member of a theatre/music/dance group

Work study/job on campus/admissions tour guide

Student Government Association

Muhlenberg Weekly, WMUH

Student club participant

Job off campus/ Volunteer

Other

How important is it to you to graduate within 4 years?

Not at all important

Slightly important

Moderately important

Very important

Extremely important

What is your major(s)?

Which categories describe you (select all that apply): (Please note that if you identify with multiple races or ethnicities, you can indicate this by selecting more than one of the categories below).

American Indian or Alaskan Native (For example: Navajo, Iñupiat)

Asian (For example: Chinese, Japanese, Korean, Indian, Sri Lankan)

Black / African American (For example: African American, Jamaican, Haitian, Kenyan, Nigerian, Ghanaian)

Hispanic / Latinx (For example: Guatemalan, Mexican, Puerto Rican, Cuban, Salvadoran, Dominican)

Middle Eastern or Northern African (For example: Lebanese, Iranian, Egyptian, Syrian, Moroccan, Algerian)

Native Hawaiian or Other Pacific Islander (For example: Native Hawaiian, Samoan, Chamorro, Tongan, Fijan)

White / European American (For example: German, Irish, English,

Italian, Polish, French)

Something not listed above (please write below)

Which of these best describes you?

Male

Female

Non-binary/Gender Non-Conforming/ Genderqueer

Prefer to self-describe

Which of these best describes you?

Gay

Lesbian

Straight

Bisexual

Asexual

Queer

Prefer Not to Say

Prefer to Self-Describe

I consider myself to have a disability

Yes

No

I describe my self as...(select all that apply)

A person who has a learning disability

A person who has chronic illness

A person who has a physical disability

A person who has a mental health related disability

A person who has visual or hearing impairment

I prefer not to answer

If not listed above, please specify:

Are you a first-generation college student? (Neither of your parents/guardians have completed a bachelor's degree)

No

Yes

I don't know

Are you a Pell Grant recipient? (You receive a grant from the federal government that does not have to be paid back)

No

Yes

Please tell us anything else that would help us to better understand why you might not have participated in any of these experiences.

Thank you for completing the survey. Follow this [link](#) to enter a raffle for a $100 prize. We will be hosting focus groups in a few weeks to learn more about your experiences. Participants will receive $80 to participate in this conversation. If you are interested in participating, please follow this [link.](#) We will be in touch with you as we arrange meeting times.

(Introduce yourself)

Thank you so much for your willingness to participate in this study. Your input will be immensely helpful in our pursuit to identify the reasons why students may not participate in co-curricular opportunities, which are learning experiences that connect with or compliment your classroom experiences. The findings will be used to actively address the barriers to engagement and promote such practices in the future; thus, your efforts will also be helpful to the larger community of students.

You should be familiar with the informed consent form associated with this project (display form to ensure they understand and recognize document referenced). Before we begin, does anyone have any questions about the consent form or the purpose of the study? [Respond to questions] [If you haven't already, collect remaining informed consent forms and put into envelope.]

(GROUND RULES)

As we mentioned in the consent form, our plan is to record the session simply to ensure accuracy of our notes. These recordings are for our use alone and will not be shared with anyone else. Is everyone comfortable with our taping the session for that purpose?

You can leave the focus group at any time if you need a quick break or would like to discontinue participation. [Turn on recorder].

(Introduce each participant)

Potential Questions:
1. To get sense of how you engage with information on campus we would like to know how you learn about co-curricular activities happening on campus. Co-curricular activities are things like internships, study abroad, independent research, community engagement - experiential learning that happens outside of the classroom.

    Probes: do you use social media or hear about things from friends, RAs, advertisements around campus, email? Instagram - what accounts do you use to find out information about activities on campus [list which ones]

    Does it depend on the activity? For example, did you hear about internships in class but study abroad through an email from the Director of Study Abroad?

2.   Do you think the methods that Muhlenberg uses to promote these activities are effective? That is, after you receive the information do you seek out more information or tell others about it?

3. I'm going to read off a list of different experiences that are available at Muhlenberg. As I read off each experience, indicate if you have participated.

    A.   **Study Abroad for a semester**
       There are lots of reasons why you might not have studied abroad or faced some difficulties engaging in this experience including financial reasons, completion of major requirements, not feeling like you know anyone else going abroad or that no one like you goes abroad. Maybe there was even family pressure making it difficult for you to go abroad. If you didn't engage in this experience, or faced some barriers when engaging, in your own words, what were they?

    B.   **MILA - short term study abroad**
        If you didn't engage in this experience, or faced some barriers when engaging, in your own words, what were they?

    C.   **Internship for credit or with an organization that has a formal internship program**
        If you didn't engage in this experience, or faced some barriers when engaging, in your own words, what were they?

    D.   **Independent research either in the summer or during the academic year**
        If you didn't engage in this experience, or faced some barriers when engaging, in your own words, what were they?

    E.   **Community engagement** either in a class or for at least several weeks or longer with one organization
        If you didn't engage in this experience, or faced some barriers when engaging, in your own words, what were they?

4.   Out of all of the experiences that we just discussed, which would you wish that you could've been able to do?

5. What do you think that Muhlenberg could do to get more students engaged in these experiences. I'm going to read them one at a time for your response.
A.   Study abroad
B.   MILA
C.   Internship (identify if student did this for academic credit or not)
D.   Independent Research
F.   Community Engagement

6. How many clubs/sport/other extracurricular engagements do each of you participate in? (Roughly how many)

7. Do you work on or off campus during the academic year?

8. Overall, how has COVID-19 impacted your experiences at Muhlenberg and your ability to engage on and off campus, finish a major or minor program of study, etc.?

9. Is there anything else that you want to share with us about your thoughts regarding participating in these types of activities that you think would be helpful for us to know?

Thank you ! You will be receiving an email from Lori Flatto regarding your payment for participation. Please make sure that you fill out the paperwork in order to be paid.

The results of this study will be available next semester and we will share them with you.

{Turn off recorder, clean up room}.