

DESIGNING AN UNDERGRADUATE PHILOSOPHY MENTORING PROGRAM: A RESPONSE TO THE LEAKY PIPELINE

ABSTRACT

Although the diversity of philosophy is increasing at the undergraduate level, there is still a significant gap between the percentage of underrepresented students that major in philosophy and the percentage that complete PhDs. With the support of a seed grant from the *American Philosophical Association*, we created four chapters of a mentoring program that provided underrepresented undergraduates with support for considering and applying to graduate school. After completing a year of the program, the majority of surveyed mentees reported that they had an increased sense of belonging within philosophy, were more likely to take additional philosophy classes, were more likely to apply to graduate school in philosophy, and were more likely to pursue a career that has some connection to philosophy. In this paper, we consider not only the benefits of the program, but also provide a guide for those who are considering creating mentoring programs at their home institutions.

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INTRODUCTION

Philosophy has a “leaky pipeline” problem. Even though the racial and gender diversity of philosophy undergraduates has been increasing, underrepresented students are still far less likely to complete graduate study in philosophy. From 2000 to 2016, the percentage of intended philosophy majors who identify as Black rose steadily from 3% to 13%, but the percentage of philosophy PhD recipients who identify as Black only rose from 1.5% to 4%. Similarly, during that same time, the percentage of intended philosophy majors who identify as women rose from 35% to 45%, but the percentage of philosophy PhD recipients who identify as women remained below 35%. These PhD rates lagged behind other disciplines, as in 2016 6.5% of non-philosophy PhD recipients identified as Black, while 45% of non-philosophy PhD recipients identified as women (Schwitzgebel et al., 2021). Thus, although the number of underrepresented students within undergraduate philosophy programs is improving, this growth has not shown up to the same degree at the graduate level. There is a leak in the pipeline that runs from undergraduate philosophy to philosophy PhD programs.

In order to help fix this leaky pipeline, we created four chapters of a mentoring program for underrepresented students at Florida State University, the University of Southern California, the University of South Florida, and Washington University in St. Louis. The first chapter of the mentoring program was founded at Florida State University during the 2020-2021 academic year by Robert Weston Siscoe, then a postdoctoral fellow at Florida State. Mentees reported being very satisfied with the program, and on an end-of-year survey, they had all of the following reactions:

- “I have to say, the program is the best mentorship program I’ve been a part of in my whole academic career. Thank you for everything you all do!”
- “I had a really great experience and I really appreciate all of the program/my mentor’s help!”
- “My mentor is the best mentor ever and we clicked very much over the last year. I’m so excited to have them as a life-long professional, academic, and personal connection. Best mentorship program I’ve been a part of in my career to date. So grateful.”
- “I think this program was extremely helpful. It has really allowed me to build a connection with others in my field.”

Due to the positive results of the first year of the mentoring program, Robert Siscoe and Lauren Willson (a graduate student and one of the mentors at Florida State) applied for and received funding from the *American Philosophical Association* to start chapters at three additional universities. The following PhD students were then selected to serve as program directors at their institutions:

- Heather Brant, University of South Florida

- Rachel Keith, University of Southern California
- Lesley Walker and Gabrielle Zhang, Washington University in St. Louis

These chapters focused on supporting diverse students by (1) increasing their sense of belonging, (2) boosting their academic growth, (3) encouraging their career exploration, and (4) promoting their leadership development, and at the completion of a year of the program, the majority of surveyed mentees reported that they had an increased sense of belonging within philosophy, were more likely to take additional philosophy classes, were more likely to apply to graduate school in philosophy, and were more likely to pursue a career that has some connection to philosophy. In this paper, we will detail the program and our current results, both to consider the potential usefulness of mentoring for fixing the leaky pipeline but also to provide a template for those who want to create mentoring programs of their own.

We will proceed as follows. In Section 1, we detail the benefits of academic mentoring for undergraduates, focusing on the ways that such mentoring can support underrepresented students. In Section 2, we then outline how we design our mentoring program, surveying the current results in Section 3. Finally, in Section 4 we reflect on the challenges we encountered and the changes we have considered moving forward. We hope that this work will serve as a useful starting place for others that hope to make mentoring a key aspect of their philosophy departments.

1 MENTORING BENEFITS

One of the primary benefits of undergraduate mentoring programs is their ability to provide extra support to underrepresented students. Mentoring programs have been shown to diversify STEM fields (Byars-Winston et al., 2015; Chang et al., 2014; Fakayode et al., 2014; Haeger and Fresquez, 2016; Johanson et al., 2021; Robnet et al. 2018). Despite this success, however, there has been little to no research on whether undergraduate mentoring is a promising strategy for diversifying academic philosophy. While there are programs that seek to mentor underrepresented undergraduate and graduate students – like the Athena in Action project for graduate women and the COMPASS program at the University of Michigan for undergraduates – we are not aware of any published research that has studied these kinds of interventions in philosophy specifically. Why have diversity mentoring programs found success in other fields, and is there reason to think that this could carry over to philosophy as well?

Undergraduate mentoring is beneficial in a number of ways. Along with serving to increase diversity, mentoring can also help students develop a sense of belonging, boost their academic performance, explore future career options, and cultivate their leadership potential. In fact, undergraduate mentoring may increase diversity *because* of these other benefits. In this section, we will survey

these potential benefits and how they connect to the broader goal of repairing the leaky pipeline in philosophy.

1.1 INCREASED SENSE OF BELONGING

One of the reasons that undergraduate mentoring can lead to an increase in diversity is because it can help students develop a sense of belonging. A sense of belonging, conceived as a feeling of being part of an institution and identifying with the educational culture, goals, and student-teacher relationships of that institution (Allen and Bowles, 2012; O'Brien and Bowles, 2013), has links to student retention (Bowles and Brindle, 2017; Hausmann et al., 2007; Marksteiner et al., 2019), and increased feelings of belonging have been associated with peer mentoring (Pye et al., 2016; Liu et al., 2022), research mentoring (Davis and Jones, 2020; Smith et al., 2020), and STEM mentoring (Apriceno et al., 2020). These benefits also extend to underrepresented students (Delgado-Guerrero and Gloria, 2023). A distinction must be drawn, of course, between institutional versus disciplinary belonging. While a sense of belonging at a particular institution might be helpful to students when it comes to closing the leaky pipeline, we are most interested in a sense of disciplinary belonging within philosophy itself. Fortunately, there does indeed appear to be a link between mentoring and disciplinary belonging, as researchers have found that mentoring can increase a sense of belonging in STEM fields for women (Du et al., 2023; Hernandez et al., 2017), racial minorities (van der Velden et al., 2023) and first-generation students (Ahmed et al., 2021).

How might an increased sense of disciplinary belonging contribute to fixing the leaky pipeline? If underrepresented undergraduates feel at home within philosophy, they will be more likely to feel comfortable pursuing further study than if they feel alienated from the philosophical community. Haslanger (2008: 219) also sees increasing a sense of belonging for underrepresented students as part of fighting back against sexism and racism within philosophy more broadly, disrupting the assumptions that philosophy is predominantly white and male.

1.2 IMPROVED ACADEMIC PERFORMANCE

Along with giving students an increased sense of belonging, undergraduate mentoring has also been shown to improve academic performance, resulting in higher grade point averages and exam scores (Haeger and Fresquez, 2016; Crisp et al., 2017). In addition, mentees report an increase in confidence when approaching research projects, increased comfortability when interacting with professors, and increased sense of independence and self-efficacy (Prunuske et al., 2017). Furthermore, mentoring has been demonstrated to improve retention rates among mentees (Crisp et al., 2017; Collings et al., 2014). Mentees are not only more likely to persist in their undergraduate pursuits, but are also more likely to pursue further graduate education and academic careers (Haeger and Fresquez, 2016). These benefits have been demonstrated across demographics, as under-

represented students not only benefit from mentoring programs in general, but even more so when they are paired with mentors who share their minority identity (Prunuske et al., 2017; Johanson et al., 2021).

These benefits play a central role in closing the leaky pipeline. Not only does mentoring increase student retention rates, leading more underrepresented students to complete philosophy programs that they enroll in, but mentees are also more likely to pursue graduate school and academic careers as well. It is likely that improvements in grade point averages and exam scores have a direct impact on these phenomena, as students that see themselves as competent and accomplished are more likely to think that is a path of study that they should pursue. Increases in independence and self-efficacy also enable students to persist in their efforts to apply to and complete graduate degrees within philosophy. All of these benefits align with Haslanger's (2008: 219) advice to increase systems of accountability and support for underrepresented philosophy students.

1.3 EXPANDED CAREER EXPLORATION

Once students have a sense of belonging and perform well within a discipline, then it becomes more natural for them to imagine it is a part of their future career. Mentees have commonly reported that their future aspirations have changed as a result of their participation in mentoring programs (Prunuske et al., 2017). Moreover, while not a direct result from all mentoring programs, students who were able to work on projects related to their minority identity, were more likely to apply to grad school and credited their research topics as motivation for their persistence in graduate school. Mentoring programs, especially those catered to underrepresented and minority students, can serve as spaces where topics important to minority identities, which are often excluded from the canon and standard classes, are introduced and explored. One study of black women in PhD programs, for example, found that "Many participants noted they would not have attended graduate school had it not been for an opportunity to investigate issues affecting the Black community" (Farmer, 2023: 89).

Philosophy mentoring programs can provide underrepresented students the opportunity to explore how their future careers might connect with philosophy, encouraging more students to pursue graduate student and remedy the leaky pipeline. When exposed to potential career opportunities, mentees may decide that they either want to pursue an academic career in philosophy or forge a connection with their chosen career path that includes graduate study in philosophy. The mentoring relationship also creates a context where mentors can introduce students to philosophical topics related to underrepresented identities that are neglected within the core curriculum.

1.4 ENHANCED LEADERSHIP OPPORTUNITIES

Mentoring has a positive impact on a student's capacity for leadership, providing students with unique opportunities that promote closer relationships to faculty, a broadened professional network, and an increased desire to engage deeply with research in the field (Nagda et al., 1998, Villarejo et al., 2008, Hunter et al., 2007; Seymour et al., 2004). Mentored students exhibited an increase in commitment, consciousness of self, and collaboration, as well as other traits associated with socially responsible leadership (Campbell et al., 2012; Dugan and Komives, 2010; Komives et al., 2005; Kezar and Moriarty 2000). Mentored students also seem to recognize the impact that mentoring has on their leadership abilities, reporting increased confidence in their research and professional skills (Hunter et al., 2007) and attributing prior mentorship as being at least partially responsible for achieving leadership roles later in life (Christie and Baghurst, 2017). Having greater capacity for and access to leadership opportunities could be especially impactful for underrepresented students, as ethnic minorities are often less represented in leadership positions even in instances where they are majority members of the workforce (Fitzsimmons and Callan, 2020; Ospina and Foldy, 2009; Obenauer and Langer, 2019).

Growth in leadership capacity can also contribute to fixing the leaky pipeline. Many graduate students in philosophy became passionate about the subject not just because of their classes but because of the extracurricular opportunities that they participated in, whether that was leading the philosophy club, helping out with conferences, or hosting reading groups. Along with increasing student interest in philosophy, participation in leadership opportunities can more readily help students imagine what it would be like to pursue a career in academia, as professors and graduate students often assume a number of leadership roles within their departments and classrooms. And to add to Haslanger's suggestions for increasing the diversity of philosophy, having students from underrepresented groups serve in leadership positions can further break down the stereotype that philosophy is predominantly white and male.

1.5 BENEFITS FOR MENTORS

And these are just the potential benefits for mentees, as mentoring can also be a valuable experience for *mentors*. Perhaps most obviously, mentors gain confidence in their leadership and professional abilities throughout the process of mentoring (Haddock et al., 2013; Dolan and Johnson, 2009). Mentors also express greater enjoyment and connection to their field and an increased sense of purpose and direction after their mentorship experience (Good et al., 2000). Mentoring can also provide mentors with a greater understanding of the challenges experienced by underrepresented students (Reddick and Pritchett, 2015; Ward et al., 2014), as mentors working closely with mentees of different cultural and racial backgrounds experience an increase in their ability to take the perspective of those different from them (Dugan and Komives, 2010). This could

be particularly impactful in fields like philosophy, where the number of mentees who are racial minorities is significantly higher than the available mentors who share that identity.

2 DESIGNING OUR MENTORING PROGRAM

It is clear that undergraduate mentoring can provide a range of benefits, both inside and outside the classroom, to underrepresented students. Perhaps most promising is that some of these benefits, including an increased sense of belonging and improved academic performance, could play a role in repairing philosophy's leaky pipeline. So how did we construct our mentoring program? Each of our chapters had a program director who oversaw recruitment and scheduling for all mentor/mentee pairs. This structure allowed the distinct mentor/mentee pairs to function as part of a larger mentoring program, not only matching students with mentors but also helping them to become acquainted with one another, explore various service opportunities, and take on leadership roles in the philosophy department. In this section, we will describe this structure, helping faculty members design their own mentoring programs along the way.

2.1 IDENTIFYING YOUR MISSION

The first step in creating our mentoring chapters was identifying our mission, a task that was completed by each of our program directors. Part of our mission was already clear. We wanted our students to be well prepared for graduate work and applications, so part of our goal was to connect with students that were considering graduate school and support them through that process. Not all of our students, however, were interested in graduate school in philosophy, as some of our mentees were also pre-law or pre-med, and some who started out with an interest in graduate school ultimately decided against applying. So not only was our mission to support students who were considering graduate school in philosophy, but we also wanted to help those who could not yet identify the role the philosophy would play in their academic and career plans.

If you're starting a mentoring program and considering your mission, some helpful questions to ask along the way might be the following:

- What are the most pressing practical questions your students face on a day-to-day basis?
- What do your students hope for from their education or career?
- What kinds of habits, practices, or skills do you hope your students develop by the end of the year?
- What are you most excited or inspired to do or share over the course of the year?

Our answers to these questions led us to emphasize an increased sense of belonging for our students along with academic, career, and leadership development –

four outcomes that evidence suggests are enhanced by academic mentoring. At Florida State, this meant that mentoring meetings featured both opportunities for academic support and career brainstorming, and mentees were also required to take on some service or leadership role within the department, whether that was leading a meeting of the philosophy club, serving as a research assistant, or helping with the Minorities and Philosophy chapter conference. Students also received support and recommendation letters for applying to summer seminars and internships in order to further explore their philosophical and career interests. At Washington University in St. Louis, the program focused on providing academic and career support to students. Students often asked their mentors for assistance with assignments or writing samples. Letters of recommendation for summer seminars or internships were also provided if needed. At the University of Southern California, the primary goals included building relationships between undergraduates, graduate students, and faculty, as well as helping undergraduates access resources that they may not have otherwise been aware of. To these ends, mentorship meetings focused on setting and working towards appropriate academic and community-focused goals. Undergraduates were also required to attend at least one department event (such as a colloquium talk, one of the graduate-student-led reading groups, or department social event) per semester.

2.2 RECRUITING AND MATCHING MENTORS AND MENTEES

Once we understood our mission, the next thing we tackled was our plan for recruiting and matching mentors and mentees. Part of this challenge was publicity – how would we get the word out about our mentoring program? For us, it made sense to use the different strategies that were already in place for communicating with philosophy majors and minors. A more general approach we used was sending an announcement through a philosophy department listserv, while a more targeted approach was sharing about the program with faculty advisors and the campus philosophy club.

At Florida State, the program was publicized at a meeting of the FSU philosophy club, a meeting of the FSU Minorities and Philosophy chapter, emailed to all of the philosophy majors, and announced through the Center for Academic Retention and Enhancement. At Washington University in St. Louis, the program directors asked all teaching assistants and professors to pitch the program in their classes, sent multiple emails to all of the philosophy and philosophy-neuroscience-psychology majors, and put up posters throughout the philosophy department building. At the University of South Florida, the program director emailed all philosophy majors and minors, encouraged professors to share the opportunity in their classes, pitched the program at Phi Org meetings (the undergraduate philosophy club), and hung posters around the department. A multi-pronged approach was also taken at the University of Southern California, asking the department's Director of Undergraduate Studies to email philosophy majors, contacting Pre-Law and PPL (Philosophy, Politics, and Law) students

via a departmental advisor, and asking teaching assistants and faculty to inform their students.

The second challenge in recruiting mentors and mentees is gathering enough information to match graduate student mentors with undergraduate mentees. In order to gather this information, we had all applicants to our program, both mentors and mentees, complete an application. Along with their contact information, monthly availability, and the number of students they could mentor, mentors also described their interest in the mentoring program, any background experiences that might be helpful, and whether they had any experience applying to graduate programs in other disciplines like medicine or law. Because we knew that many of our mentees would be undecided about their future plans, and that one of the goals of our program was general career development, we wanted to offer mentors that could make potential connections between philosophy and other types of graduate study.

Mentee applicants shared their year in school, previous involvement with the philosophy department, and availability, along with what they hoped to get out of the mentoring program and any plans they had for continuing their education. We also left room for applicants to share anything else they wanted us to keep in mind as we matched them with a mentor. This information allowed us to match mentors and mentees in a way that paired the career aspirations of our mentees with the previous experiences of our mentors. While perfect matches were not always possible, as all of our mentors had experience applying to philosophy programs and few had applied to law school or medical school, knowing what mentees were looking for in a mentor also enabled us to point them to other resources on campus for any support that we could not provide.

2.3 SCHEDULING AND SUPPORTING MENTORING SESSIONS

While we were in the process of selecting and matching our mentor/mentee pairs, we also began to consider scheduling. We gave our graduate mentors some guidance as to how often they should meet with their mentees, planning backwards from the end of the fall semester. We planned to have 2-3 mentoring sessions per semester to strike a balance between consistency and not overwhelming mentors and mentees. From there, we decided when we wanted the *last* mentoring session of the semester, making sure not to place it too close to the end-of-semester break to avoid finals studying. After we knew roughly when the last mentoring sessions would be held, we then scheduled the others to maintain consistency throughout the semester.

Scheduling our mentoring sessions for the fall semester also made it clear when we needed to receive applications for the program. Our ideal application deadline was somewhere between 10 days and three weeks after the semester started. With a deadline sooner than that, we didn't yet have enough sign-ups, and with a later deadline, there wasn't enough time to fit in the rest of the semester

schedule. With all of these considerations, a possible schedule for recruiting, matching, and mentoring might look like the following:

- First Advertising Blast to Possible Mentors and Mentees: Last week of August
- Second Advertising Blast to Possible Mentors and Mentees: First week of September
- Mentor and Mentee Application Deadline: End of first week of September
- Mentor and Mentee Matching: Second week of September
- Mentor Meeting 1: Third week of September
- Mentor Meeting 2: Third week of October
- Mentor Meeting 3: Third or fourth week of November (depending on Thanksgiving break)

This, of course, is just scheduling for half of the academic year, but once our program was up and running, scheduling for the spring semester was much more straightforward. Working around advertising and receiving applications at the beginning of the semester and Thanksgiving and end-of-semester break made the fall semester particularly challenging.

Along with scheduling when mentoring sessions should take place, it was also helpful to give our graduate mentors some guidance on what they should discuss during each session. Our program directors provided mentors with a guide containing possible icebreaker questions and discussion topics for each mentoring session, facilitating those interactions and helping mentors stay on track with our larger goals for the program. In their first session, for example, mentors asked mentees about their academic goals, their career goals, and how these goals did or did not connect with philosophy.

From there, the mentoring sessions became increasingly more personalized. If a student was planning on applying to graduate school in philosophy, mentors helped walk them through that process. For other students though, those who were planning on applying to graduate school in another area or were just exploring their interest in philosophy, mentors were then able to personalize the mentoring sessions to meet those needs. At Florida State, mentors were provided with discussion topics and application timelines for mentees depending on whether they were interested in philosophy, law, or medicine. At Washington University in St. Louis, mentors were provided with information on their mentees philosophical interests and academic goals prior to their first meeting so that they could create personalized mentorship plans. At the University of South Florida, mentors were encouraged to cater meetings to the particular interests and goals of their mentees, and if a number of mentees had similar goals or concerns, group activities, meetings, or talks were planned. At the University of Southern California, students were placed into one of three tracks (First and Second Year, Upper Year Graduate School, and Upper Year Law School) to help

guide their mentors. The First and Second Year track was highly flexible and focused on encouraging mentees to explore the ways in which philosophy could be useful both in their future career and in creating a meaningful life. Mentees in the Upper Year Law School track were directed to university-approved resources and encouraged to draw upon their philosophical backgrounds to enrich their applications. The Upper Year Graduate School track focused on connecting undergraduates to potential letter writers and developing a writing sample. If a student in this track changed their mind about pursuing graduate school in philosophy, their mentor then adapted their sessions to their mentee's goals, drawing from resources provided for all three tracks.

2.4 MENTORING BEST PRACTICES

Along with providing content for mentoring sessions, it was also helpful to share some general best practices with our graduate mentors. The best way to begin mentoring is by *developing strong relationships*. At its core, mentoring undergraduates is about accompanying students through the beginnings of their professional journeys. This means providing resources, opportunities, encouragement, and even constructive feedback throughout the mentorship to help the student accomplish their goals. But in order for these resources and feedback to have their full effect, mentors and mentees must have a shared foundation of trust and respect for one another that can only be developed through a close, long-term connection.

In order to build a strong rapport, mentors will need to acknowledge that building a relationship with their mentees takes time and effort. Like all good relationships, creating the mentor/mentee bond does not happen overnight. Program directors should clearly communicate this expectation to prospective mentors, encouraging them to consider their obligations and whether they have the capacity for developing a strong mentoring connection. This will guard against mismatched expectations about what mentoring requires and prevent possible disappointments down the road once mentoring bonds have already been established.

In developing a relationship with their mentees, mentors shouldn't be afraid to share aspects of their personal lives. While it is still wise to maintain professional boundaries, having mentors share about their own background, family, and career journey can help create a connection that goes beyond the typical instructor/undergraduate relationship. Conversations can take place in slightly less formal settings than a department office, like over a drink at the local coffee shop or on a walk around campus. This can then lead to a discovery of common background and interests that can establish a stronger rapport between mentors and mentees.

Once a strong relationship is established, mentors should focus on helping their mentees *build knowledge*. There is a temptation in mentoring to simply tell

mentees how things are done and how they should pursue their academic and career growth. But mentees may have different goals and interests than their mentors, and college is a time for students to explore and create their own vision for their lives. In this vein, mentors should come alongside students as a co-explorer, encouraging them to get involved in opportunities that pique their interest and then supporting them along the way.

Even in cases where a mentee already knows that they want to pursue graduate study in philosophy, a focus on building knowledge will help the student gain important practical knowledge and skills. Faculty members can encourage students to develop their philosophical acumen by having them consider taking a wide range of philosophy classes, participating in a philosophy club or Ethics Bowl, or attending summer institutes in philosophy. All of these opportunities allow mentees to further develop as a philosopher and a leader while also giving them a range of experiences that they can then use later to decide what they want to focus on as a graduate student.

Perhaps one of the most difficult aspects of being a mentor is *providing constructive feedback*. In the midst of encouraging mentees to take advantage of a range of different opportunities, mentors should allow their mentees to make mistakes. This will encourage independence and allow for creativity, helping the mentee grow and adapt when they encounter novel challenges. In the midst of this process, though, mentors should provide guidance and feedback about what the mentee might change moving forward. Mentors should regularly emphasize the things that their mentee does well, reinforcing the trusting connection between the mentor and mentee and reassuring the mentee of the good intentions behind any negative feedback.

Furthermore, the feedback that mentors offer should always include suggestions for improvement. What concrete things can the mentee do to improve in the particular area of concern? This will give the mentee clear goals for the future and allow them to track their own growth and progress. In order to make the student even more comfortable with feedback, the mentor can propose meetings where they both give one another feedback, with the mentee giving feedback on how the mentor can improve in their role as a mentor and the mentor suggesting ways that the student can improve in their academic and career pursuits.

2.5 UNIVERSITY AFFILIATION AND PARTNERSHIPS

Once we established our mentoring program, we also considered how the program fit into the larger academic landscape at our universities. It might be worth becoming a registered student organization (RSO), as some institutions offer a small amount of funding or other kinds of support for their RSOs. At Florida State, for example, RSOs can apply for funding through the Student Government Association to fund supplies, food, and event travel. At the University of South Florida, funding was available through the Philosophy Graduate

Student Organization, while financial support at Washington University came directly through the philosophy department itself.

It may also be helpful to consider partnering with other organizations on campus, including organizations within the philosophy department. As we already mentioned, at Florida State the philosophy club, the FSU chapter of the Minorities and Philosophy program, and the Center for Academic Retention and Enhancement all helped advertise the mentoring program. Then, when more support was needed for students who were planning to apply to law school or medical school, mentors made sure mentees were on track with the FSU Pre-Law and Pre-Medical Advising programs, allowing the mentoring program to collaborate in meeting our students' needs with other units on campus. At Washington University, the mentoring program partnered with the department to put on panels and events. As previously discussed, the University of South Florida mentoring group partnered with Phi Org (the undergraduate philosophy club) for promoting the program and encouraged mentees to attend meetings in order to connect with other philosophy students and the department more broadly. Mentees were also encouraged to attend social events and seminars planned by our Philosophy Graduate Student Organization to foster a sense of belonging within the philosophy department more broadly. The mentorship program at the University of Southern California partnered with the university's MAP chapter and department-specific graduate student organization to host events, many of which received funding assistance from the department and the university advising office to help collect and distribute resources.

3 OUR RESULTS

During the 2022-2023 academic year, the University of South Florida had 5 mentees complete the program, the University of Southern California had 15 mentees complete the program, and Washington University had 8 mentees complete the program. Mentees then completed an end-of-year survey in order to assess the effectiveness of the program. Of these 28 students, 15 completed the survey (a 53.6% response rate) and 11 of those respondents consented to their results being shared. Of the respondents, 8 identified as women and 3 identified as men, while 2 were graduating seniors, 5 were juniors, 2 were sophomores, and 2 were freshmen. In what follows, we will summarize the results of this survey as they connect to our targeted outcomes.¹

3.1 INCREASED SENSE OF BELONGING

As one mentee said, "Prior to the mentorship program, I did not have a constant point of contact within the philosophy department, nor did I find communities within the department." One of our goals was to change that, helping students

¹This research was granted an exemption by the Institutional Review Board, as it presents no risk or minimal risk to the human subjects involved.

(i) feel connected to and (ii) supported by the philosophy department. At the conclusion of the program, survey respondents said both of those things, indicating that the mentoring program was successful in increasing their sense of belonging:

- “The greatest development for me has been one of belonging. It is quite easy as an undergraduate to feel as though your contributions to philosophy are derivative and unproductive, but this experience has made me feel heard and like my contributions are meaningful even at my level of experience. I feel like a proper constituent of philosophy.”
- “Having a connection to actual people in the department beyond just the student-teacher environment in classes made me feel like I could have a more active role and be connected more directly to philosophy-related opportunities.”

Overall, respondents unanimously reported that they felt more supported by the philosophy department, with 72.7% indicating that they strongly agreed that they felt more supported and 27.3% reporting that they somewhat agreed:

Rate your agreement with the following statement:
After working with my mentor, I feel more supported by the philosophy department

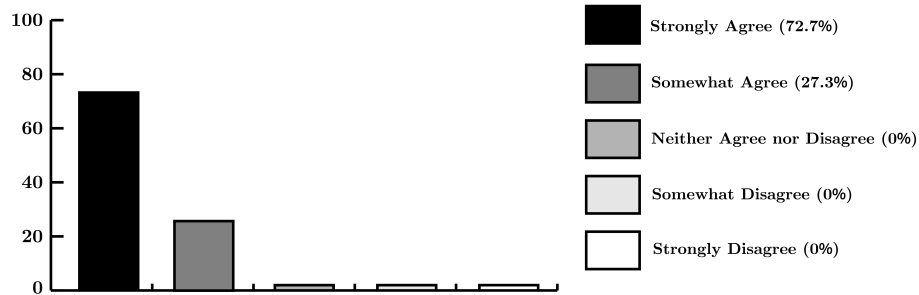


Figure 1: Department Support

Along with feeling more connected to the philosophy department, mentees also reported feeling more confident in their philosophy classes, saying that the mentoring program helped them overcome some of the imposter syndrome they were experiencing in philosophy spaces:

- “[The mentoring program] gave me a lot more confidence with my classes and gave me an entirely different way to think about approaching my philosophy classes and papers. The advice was awesome, and I didn’t feel like as much of an imposter in the philosophy space.”
- “This program was exceedingly helpful with my confidence. I’m really grateful to my mentor for her time and energy. She gave me a lot of great advice and helped me get through some of the imposter syndrome I was experiencing in my classes. I really think that this program is a great way

to help minorities feel more comfortable in a space where they don't often see or hear people like them.”

Perhaps as a result of their increased confidence, mentees also overwhelmingly said that they were more likely to get involved in the philosophy department in other ways beyond the mentoring program:

After working with a mentor, are you more or less likely to get involved in other extracurricular activities in the philosophy department?

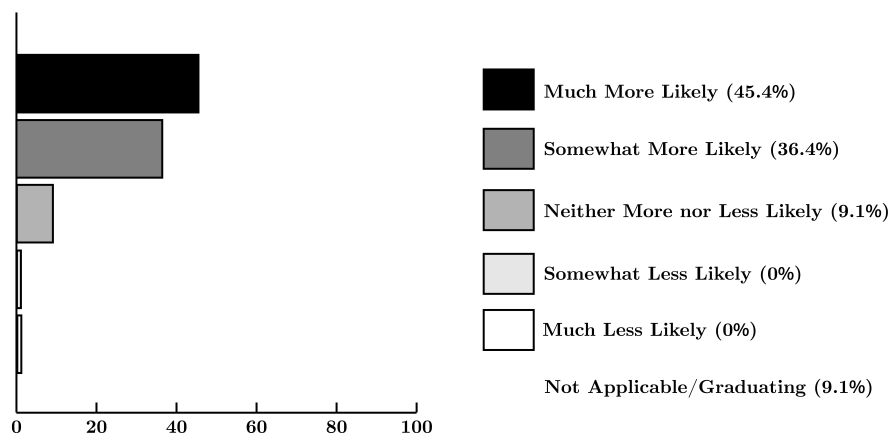


Figure 2: Additional Extracurricular Activities

From these results, it is clear that mentees experienced an increased sense of belonging from participating in the mentoring program. Not only did students report feeling more connected with and supported by the philosophy department, but they also indicated that they were more likely to take advantage of other extracurricular opportunities in philosophy.

3.2 ACADEMIC DEVELOPMENT

Along with helping students feel more welcome in the philosophy department, we also wanted the mentoring program to help them develop academically. And as we expected, some of our mentees said that having a mentor help them overcome various academic challenges:

- “I was able to get help from my mentor on my philosophy writing, and felt I was able to produce better work as a result.”
- “I do feel like the mentorship program as a one-on-one relationship helped me get through some tough philosophy classes.”

In addition to helping students improve in the classes they were already taking, the mentoring program encouraged students to take more philosophy classes moving forward. Mentees said that their mentors were able to help them find other philosophy courses that connected with their interests, helping them go

deeper than they would have otherwise. And not only did students report that the mentoring program helped them decide which classes to take, but the majority said that they are now more likely to enroll in additional philosophy classes moving forward. 45.4% of respondents said that they are much more likely to take additional philosophy classes, while 27.3% said that they are somewhat more likely:

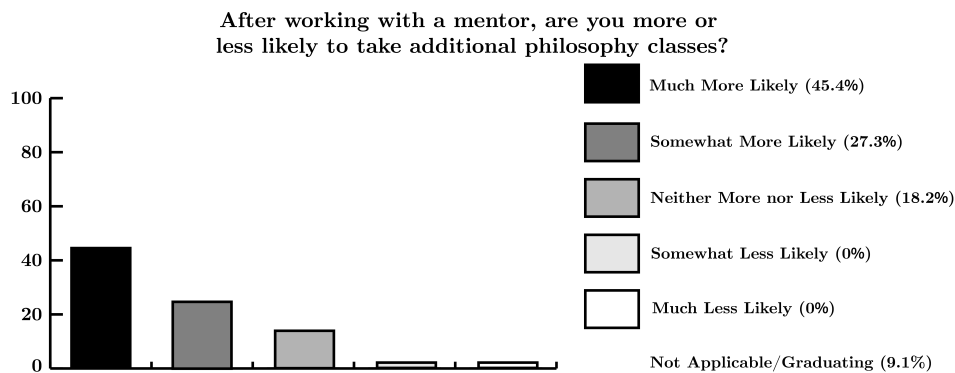


Figure 3: Additional Classes

It may be that our first aim – helping mentees develop a sense of belonging within philosophy – aids their academic development and vice versa. As students became more comfortable with the department, they perceived themselves as producing better work, making them feel more at home in philosophy. Ultimately, this then made them more likely to participate in further philosophy classes and events.

3.3 CAREER EXPLORATION

Perhaps our most important goal for our mentoring chapters, at least in terms of fixing the leaky pipeline, was helping students think about how philosophy connects to their future careers. And we certainly had students who, as a result of the program, reported being more likely to apply to graduate school in philosophy:

- “The mentoring program has made the process for applying and getting into a graduate school much more clear, and I feel that I have a stronger grasp as to what is expected of me as an applicant. This clarity has allowed me to grow more passionate about philosophy, and has strengthened my desire to go into a philosophy career.”
- “After participating in the mentoring program, I’m more sure I want to go on to a PhD and do research in philosophy.”
- “The mentoring program has made the philosophy graduate/career path more clear, as far as what to expect and what I can do now to prepare, which has increased my interest in pursuing a future career in the field.”

- “My mentor gave me some great insights on life after undergrad and what being a graduate student in philosophy is like. She answered lots of questions and definitely made me more interested in pursuing a career in philosophy.”
- “The mentoring program helped encourage me to apply to graduate school even when at times applying out felt a daunting task. In turn, I am now in graduate school pursuing my masters and will apply to PhD programs in the fall.”

Nevertheless, even though we had many students say that they were more likely to apply to graduate school in philosophy, a large number also indicated that they were not. Of those who responded to the survey, 36.4% reported being no more likely to apply to pursue graduate school, while 9% said that they were much less likely:

After working with a mentor this year, are you more or less likely to apply to graduate school in philosophy?



Figure 4: Apply to Graduate School

The first thing to say about these results is that even though one of our desired outcomes was to see more students apply to philosophy graduate programs, our more fundamental aim was to help students better understand their career options both within and outside philosophy. Philosophy graduate school can be very challenging, and we did not want to treat it as something that all our students should pursue. And when it came to this more fundamental aim, the majority of our students said that their mentors helped them think through their philosophy-related career options:

Rate your agreement with the following statement:
 My mentor helped me think through future career options related to philosophy

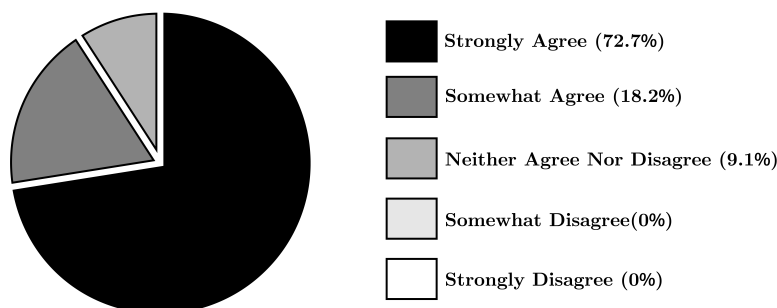


Figure 5: Future Career Options

So our program was successful in this respect, as almost all of our students considered how philosophy connected with their future careers. Why, though, if all of our students considered career options related to philosophy, did some of them say that they were less likely to apply to graduate school? For some, learning more about continuing on in philosophy reinforced their decision to go in another direction with their careers:

- “The mentoring program solidified my intent to attend law school and generally study subjects more related to philosophy and jurisprudence.”
- “I anticipate a career in medicine, but more than ever I feel as though my interest in philosophy (with a particular emphasis on ethics and philosophy of consciousness) will support me throughout my continuing education. I may even consider pursuing an advanced degree in philosophy to complement my existing path.”
- “[My mentor] really helped me work through my decision to attend law school and look into what the application process entailed.”

Along with this increased clarity about going in a different direction, though, students also expressed a desire to continue to engage with the more philosophical parts of their intended field. We saw that 54.6% of our students said that they were more likely to apply to graduate school in philosophy, but 72.7% said that they were more likely to pursue a career that they thought has a connection to philosophy:

After working with a mentor this year, are you more or less likely to pursue a career that has some connection to philosophy?

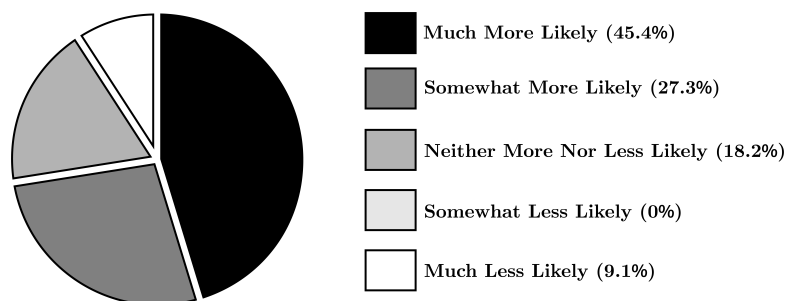


Figure 6: Careers Connected to Philosophy

We are inclined to see these results as a success. We wanted our students to consider graduate school in philosophy, but most importantly, we wanted all of them to be well-informed about their options. This is what our mentees reported, as the vast majority said that they were able to think through how their career plans connect with philosophy. And for those that did end up applying to graduate school, they reported being better prepared when they did submit applications. We hope that the cumulative effects of underrepresented students feeling more welcome, being better academically prepared, and actively considering graduate school in philosophy will have a tangible impact on philosophy's pipeline problem.

4 MOVING FORWARD

Our mentoring chapters are off to a strong start. There is evidence that they have been successful at helping mentees develop a stronger sense of belonging, develop academically, and explore their career options, things that we ultimately hope will serve to close the leaky pipeline within philosophy. At the same time though, our experiences directing these chapters has demonstrated a number of areas for potential improvement. In this section, we will discuss things that we could potentially change moving forward, including making more deliberate attempts to assess student growth in leadership, integrate research opportunities, recruit diverse mentors, and support graduate student mentors.

4.1 ASSESSING LEADERSHIP

Moving forward, we can better evaluate the leadership growth of our mentees. As we have discussed, there were several outcomes we wanted to see as a result of our mentoring program. We wanted to serve our students by (1) increasing their sense of belonging, (2) supporting their academic growth, (3) encouraging their career exploration, and (4) promoting their leadership development. While we did succeed in including elements in our chapters

that focused on each of these outcomes, our current end-of-year evaluation only speaks to the first three. Future evaluations should also assess the extent to which the program is helping students develop into leaders as well.

In order to gauge student growth in these areas, it will be helpful to gather both quantitative and qualitative data. On the quantitative side, we can have students rate their agreement with the following statements, selecting from strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree and strongly disagree:

- The mentoring program has helped me develop a sense of leadership within the philosophy department.
- I now feel more confident in taking leadership roles within the philosophy department.
- I now feel more effective in taking leadership roles within the philosophy department.
- This year, I have participated in more leadership roles and experiences than I have in previous years.

Along with these quantitative survey questions, we can also have students respond to qualitative queries, both about their growth as leaders and how they would like to grow in the future:

- Explain in your own words how the mentoring program has impacted your development as a leader.
- Are there any leadership roles or experiences that you plan to take moving forward? If so, how has the mentoring program prepared you for these experiences, and what ways do you still need to grow as a leader to fully take advantage of these opportunities?

With this data, we will be able to assess the extent to which mentees are experiencing growth as leaders within the program along with what kinds of additional opportunities or experiences could be fruitfully integrated into the work we are already doing.

4.2 DIVERSE MENTORS

One challenge we encountered in pairing mentors and mentees was the lack of mentors from underrepresented groups. Many of our mentees wanted to be paired with someone that identified as their same race or gender, and research suggests that academic mentoring can have an even greater impact when mentors and mentees share their minority identity (Prunuske et al., 2017; Johanson et al., 2022). Unfortunately, with some of our chapters, the mentors who volunteered were not able to satisfy all of these requests. Of course, this challenge may be inevitable for a mentoring program of this type. By definition, underrepresented students are not in the majority when it comes to graduate

students, so finding mentors that match mentor identities is challenging if not impossible. At the same time, there are a number of things that can be done to try and close this gap.

One important step is focusing on this issue when recruiting mentors. At Florida State, we recruited mentors from the Minorities and Philosophy Club, which led to an ongoing collaborative partnership between the mentoring chapter and the FSU Club. Due to recruiting a number of underrepresented graduate mentors, the chapter at the University of Southern California was able to avoid a mismatch between mentors and mentees altogether.

In addition to recruiting more mentors from underrepresented groups, program directors can also place a stronger emphasis on preparing mentors who do not share the same identity as their underrepresented mentees. Using resources like the American Philosophical Association's Mentoring the Mentors Toolkit (2019) or articles on reaching underrepresented students (Biswas, 2019; Cornwall, 2020), program directors can help mentors think through and prepare for the challenges of mentoring students who do not share their identity.

4.3 UNDERGRADUATE RESEARCH

Much of the work examining the impact of mentoring on undergraduate academic success focuses on STEM programs, and it is common in STEM departments for undergraduates to have opportunities for "hands-on" research in their field. Hands-on experiences could include working as research assistants, participating in labs, and helping run experiments. Having undergraduate research experiences has been credited with an increase in retention of underrepresented students and an increase in feelings of career preparedness (Cole and Espinoza, 2008; Hurtado et al., 2008; Robnett et al., 2019; Wilson et al., 2012), and such experiences offer an obvious opportunity for more in-depth mentoring. In fact, mentoring is often thought of as one of the key aspects of undergraduate research (Osborn and Karukstis, 2009), making undergraduate research a natural addition to existing networks of philosophy mentors and mentees.

Thus, another way we could develop our mentoring chapters might be to include a number of research opportunities for undergraduates. Unfortunately, undergraduate research experiences are harder to come by in philosophy departments. While faculty may occasionally request research assistants for personal projects, this position is rarely filled by undergraduates. Completing a senior thesis is a common requirement of philosophy majors that might play the role of a research experience, but this usually occurs at the end of the student's undergraduate career, and underrepresented students potentially benefit most when they have multiple research experiences that begin early in their studies (Haegar and Fresquez, 2017). For this reason, it might be helpful for philosophy faculty to consider embedding undergraduate research opportunities within their

courses that can supplement an already existing philosophy mentoring program.

Another way to fill this lacuna is to tap into existing programs. There are a number of summer workshops and diversity institutes oriented toward undergraduate students in philosophy, helping them to go deeper and explore their philosophical interests. Our mentoring chapters could encourage students to apply to and take advantage of such opportunities, including all of the following:

- Philosophy in an Inclusive Key Summer Institutes (PIKSI)
- The Cultivating Underrepresented Students in Philosophy (CUSP) Workshops at Penn State
- The Pittsburgh Summer Program in Philosophy of Science at Pitt
- The Colorado Summer Seminar in Philosophy at UC Boulder
- The UC San Diego Program for the Advancement of Women in Philosophy
- The Summer Immersion Program in Philosophy at Brown
- The Hamilton College Summer Program
- The Rutgers Summer Institute for Diversity in Philosophy

Undergraduate conferences may be another way for students to actively engage in the field, whether those conferences are undergraduate philosophy conferences or institutional research symposiums that include students across disciplines. Given that undergraduate research experiences increase retention, especially for underrepresented students, these sorts of programs and events should be further emphasized with undergraduate students considering careers in philosophy. It may even be beneficial to create new forms of research experiences to increase their prevalence and accessibility, giving students as many opportunities to reap the benefits of hands-on experience as possible.

4.4 SUPPORTING GRADUATE STUDENT MENTORS

Finally, another way that we might improve the mentoring program would be to consider how participation in the program ultimately impacts our graduate student mentors. As it is currently structured, the program rests a lot of its structure on the support of graduate students, with PhD students serving both as program directors and mentors. Enlisting graduate students as mentors is helpful in terms of acquainting undergraduates with the application process, as most graduate students completed their round of applications within the past few years. This approach holds many possible benefits for graduate students. Not only does it allow them to build skills that will be valuable as future faculty members, it also gives them a way to demonstrate to potential employers that they are interested in and have experience mentoring underrepresented undergraduates.

Nevertheless, despite these potential benefits, there are also costs for graduate students as well. Spending time building a mentoring relationship necessarily

takes away from other opportunities, like spending more time on dissertation research or in the classroom. It is also possible that investment in mentoring could extend graduate student time to degree completion and, for a combination of these reasons, make them less competitive on the job market. At present, we are not sure what the impact of graduate student involvement will be, as the majority of our mentors are still in the process of completing their degrees. Many of the students that served as mentors were early in their PhD programs, making it impossible to compare job placement for PhDs who served as mentors and those who did not. Future studies of similar mentoring programs in philosophy might consider how serving as a graduate student mentor impacts a PhD recipient's future career prospects, along with how to make such programs better suited to graduate student needs. Regardless of these results, however, fixing the leaky pipeline should not fall solely on the shoulders of graduate students, and finding more ways for faculty members to support programs like these is imperative for their sustainability and long-term success.

5 CONCLUSION

In the past two decades, philosophy has made meaningful strides in reaching underrepresented students. From 2000 to 2016, the share of intended philosophy majors who identify as Asian, Black, and Hispanic rose steadily (Schwitzgebel et al., 2021), with 13% of intended philosophy majors identifying as Asian, 13% identifying as Black, and 12% identifying as Hispanic. Nevertheless, these increases have not shown up to the same degree in philosophy PhD recipients. In 2016, only 4% of PhD recipients identified as Asian, 4% identified as Black, and 5% identified as Hispanic.

One potential intervention for fixing this leaky pipeline is undergraduate mentoring. In this paper, we have laid out our approach, a mentoring program that engages underrepresented students by (1) increasing their sense of belonging, (2) supporting their academic growth, (3) encouraging their career exploration, and (4) promoting their leadership development. Through the mentoring program, we have seen meaningful improvements in many of these areas, providing evidence that undergraduate mentoring is indeed one promising remedy to philosophy's pipeline problem. We hope that our attempts can serve as an instructive guide for all those that are interested in adopting this practice at their home institutions.

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