Designing a Mentoring Programme for PhD Applicants: Lessons from the Applicant Mentoring Programme (AMP)

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Abstract

This note describes the Applicant Mentoring programme (AMP), an initiative led by economics PhD students at five British universities. The goal of AMP is to lower information barriers faced by applicants to PhDs in economics who come from under-represented backgrounds. By going over the motivations for setting up AMP and the details of its day-to-day operations, we hope this note can be useful to other universities interested in running similar mentoring schemes. We also provide data on the backgrounds of mentees who benefited from AMP between 2020 and 2023.

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Introduction

In research-oriented universities, economics departments exhibit large disparities in the representation of socioeconomic and ethnic backgrounds. For instance, in British universities, economists of Black, Pakistani, and Bangladeshi heritages are significantly under-represented compared to the general British working-age population (Advani et al., 2020). In 2018, women constituted only 26% of British academic economists (Bateman et al., 2021). While specific data on the financial backgrounds of economists' families in the United Kingdom is unavailable, only one in twelve students from public schools take A-level economics, whereas this ratio increases to one in five for students in private schools (Carroll and Gill, 2017).

Similarly, the economics profession in the United States is characterised by an underrepresentation of ethnic minorities (Bayer et al., 2020), of women (Ginther and Kahn, 2021), and of individuals whose parents did not go to university (Schultz and Stansbury, 2022). The underrepresentation of some demographic groups among academic economists is also reflected in the composition of economics PhD students.

Addressing the lack of diversity in economics is not simple: it requires the involvement of multiple actors (PhD students, faculty members, professional associations of economists) at several stages of the pipeline (high school and earlier, undergraduate and postgraduate level, early career). To try to make progress at the PhD level, we created in 2020 a mentoring scheme for applicants to PhD programs in economics. The program, initially run by PhD students at the London School of Economics (LSE), expanded in 2021 to include four other economics departments in the UK (Cambridge, Oxford, University College London and Warwick). The target of the programme are students from backgrounds that are under-represented in the economics profession, broadly defined. More specifically, the programme focuses on first-generation university graduates, students from low socio-economic backgrounds, females, students of under-represented race or ethnicity, and students with a disability. The programme relies on volunteer mentors recruited among PhD students. Below, we report some lessons we have learned in running AMP which we hope can provide support to anyone wishing to create or upscale a similar program. In total, between a.y. 2020/21 and a.y. 2022/23, AMP mentored 467 applicants with the help of 139 mentors.¹

1 Why a mentoring program?

Mentoring applicants is just one of the many steps that can be taken to address the lack of diversity and inclusivity in economics. Other initiatives within academia include outreach schemes, meansbased grants, changing recruitment and selection practices, and collaborating with minority-serving institutions (like state schools in the UK or historically Black colleges in the US). We decided to

¹The breakdown of mentees by year is as follows: 97 mentees in 20/21, 206 in 21/22 and 164 in 22/23. The corresponding numbers for mentors are 31, 75 and 33 (mentors may be counted multiple times if they participated in AMP in more than one academic year).

put our efforts into mentoring for three reasons: (i) the applied micro literature has provided convincing evidence that mentoring is an effective tool to to improve outcomes of candidates from minority backgrounds, in particular in the labour market,² (ii) a mentoring scheme can be set up with relatively limited resources (money, time, institutional support and even knowledge of the local school/university system), and (iii) a mentoring scheme for PhD applicants taps into one of the most relevant pool of knowledge about PhD applications: applicants who have recently been admitted to one of those programs.

2 Involving the department and the university

The Applicant Mentoring Programme is a purely student-led and student-oriented initiative. Throughout the mentoring programme, prospective applicants to PhDs in economics interact with graduate students in the five partner universities without the involvement of faculty members. This is to ensure that mentees feel comfortable discussing their application materials openly. Additionally, this guarantees that AMP mentees do not get an advantage in the application process by getting access to faculty members who might review their application, or who could provide insider advice about the peculiarities of one university's selection process.

However, both at our university (LSE) and in the other partner universities, we have found it fruitful to engage in a constant dialogue with faculty members. We have also benefitted from the advice provided by the university's legal team, in particular when handling sensitive data on mentees (see section 7). The involvement of faculty members in the design and monitoring of AMP has been essential for two reasons.

First, it ensured that the advice provided by mentors was consistent with the criteria used to select PhD applicants by the admission committee. Even though PhD students have recently gone through the PhD application process themselves, this may change from one year to the next, and it is essential to make sure that mentors' advice is as relevant as it can be. To this end, a yearly meeting with the head of admission at LSE has helped making surethat our understanding of the application process was up-to-date.

Second, the department of economics at LSE has provided resources to help AMP grow. In particular, the department mobilised its social media channels to help with the outreach of AMP, and it provided financial support to pay for a part-time administrator of the programme who helped us run AMP from 2022 onward (more on this below).

Beyond providing advice and some resources, the involvement of the five departments has been purposely limited: AMP is exclusively managed by students. The AMP "staff" is organised

²Several studies show that mentoring students can improve their job market outcomes. Resnjanskij et al. (2023) find that offering mentoring by university students to youths from low socioeconomic statuses (SES) in Germany provides low-SES mentees a substitute for the family support that high-SES children benefit from and improves labour-market orientation. Alfonsi et al. (2022) design a mentoring scheme targeting Ugandan vocational students to help with their school-to-work transition. They find large positive impacts on the probability of being employed and on mentees' earning. They document that mentoring is effective through the combination of encouragement and credible information.

as follows:

- One part-time **administrator** who is in charge of the day-to-day activities of AMP. The AMP administrator is an MSc student at LSE and is paid by the department of economics at LSE. He is the only paid member of AMP.
- One to three **coordinators** at each of the participating universities. The coordinators are PhD students who oversee the mentoring effort at the partner universities. They also assist the coordinator when needed. They are volunteers.
- Up to 30 **mentors** at each of the partner universities. Mentors are PhD students who volunteer their time.

3 Screening mentees

Mentors for the Applicant Mentoring Programme are PhD students who are all volunteers. The number of mentors and their mentoring capacity (how many mentees they are willing to take) determines the scope of the programme each year. The number of mentors fluctuates from year to year. In the last AMP campaign (2022/23), 33 mentors across the five partner universities joined AMP and supplied a mentoring capacity of 164 mentees (4.97 mentees per mentor, on average). In 2021-2022, 75 mentors joined, and they offered a capacity of 206 mentees (2.75 mentees per mentor).

Due to a high demand for mentoring, we introduced a selection process to screen AMP mentees in 2021-2022. Selecting mentees is a challenging process but it is crucial to ensure that those students who receive mentoring are also those who can gain the most from it. We asked applicants to fill out a form where they could indicate why they would benefit from the mentoring programme (the full set of questions in the form is reported in appendix A). Prospective mentees were also asked about their background, how familiar they were with the application process, and how much support they could get from current employers, professors or mentors. We then used four criteria to screen out applicants who we thought might not benefit as much from AMP because they appeared very qualified: if one of their parents had a PhD, if they worked as predoctoral fellows in research-oriented universities, if they had a master's degree in economics from a research-oriented university and if they reported being familiar with the PhD application process. AMP applicants who scored highly on all of these measures were screened out from the pool of applicants.

4 How to reach out to mentees?

Advertising the mentoring programme so that it reaches students who most need it can be challenging. It is tempting to use social media to maximise outreach, yet it may leave out students who do not use social media frequently. We relied on a hybrid approach that first leveraged personal networks of faculty members and professional networks of relevant organisations, before turning to social media. In a first step, we got in touch with professors who work in countries where students who are under-represented in economics live and work; this mostly included individuals working in developing countries or who were in contact with agencies working in developing countries. We also took part in a webinar by J-PAL Africa to advertise the programme. Then, with the help of the department's communications team, we advertised AMP through several social media channels (first among which Twitter, but also Facebook and Instagram). Mentors also leveraged their personal networks to advertise AMP.

Our advertising campaigns displayed a fair degree of path-sensitivity: a particular tweet, webinar or email can have a large impact on the enrollment rate and composition of AMP mentees. In particular, we noticed an enrollment spike from several African countries after the J-PAL webinar and a specific tweet by a colleague of ours generated an increase in enrollment from Latin America. It is still unclear to us what the best way to advertise AMP is, not least because the "right" mix of ethnicities and socio-economic statuses we would ideally want to see in economics is hard to define (should the distribution be the same as in the British population? Should it be the same as in other social science departments?).

5 Recruiting and training mentors

Mentors are PhD students at one of the five institutions taking part in AMP, and provide their time on a volunteer basis. In our experience, recruiting mentors has proved fairly easy as PhD students were keen to take part in this initiative. Mentors indicate their preference for how many mentees they would like to take on. They are also given the option to say if they would like to be matched to mentees of a specific background or mentees interested in a specific research field.

While the content of the mentor-mentee conversation is not guided, we offer a 30-minute optional training session for mentors to set expectations about the mentoring program. The training session includes information on (i) logistical details on the interaction with the mentee; (ii) information on what type of information mentees have found helpful in the past; (iii) best practices on how to handle sensitive situations, and (iv) advice we received from admission committees.

6 The matching process

Both mentors and mentees can express preferences about the field of research (*e.g.* Development) or the demographics (*e.g.* female) of the, respectively, mentee or mentor. Subject to capacity constraints, the preferences of mentees and mentors are taken into account in the matching process. In our experience, few mentees and mentors indicate these preferences. When no preferences are expressed, preferred field of research and nationality are used as a guide for the matching process.

Matching is done in a centralised manner across the five universities taking part in AMP. This coordination is important to ensure that a particular student does not receive mentoring from multiple universities and, at the same time, to ensure the best matches based on stated preferences. Once mentees are matched with mentors, these matches are communicated with the coordinators of each member university. When sending information to mentors about who they have been matched with, we redact information on mentees' ethnicity, gender and disability. These data are sensitive and mentees only consent to this information being used for monitoring purposes when filling out the form (see next section).

7 Handling sensitive data

Our sign-up form includes questions about mentees' ethnicity, disability and sex. These pieces of information are "protected characteristics" under UK law (2010 Equality Act, 2018 Data Protection Act) and need to be handled with special care. Importantly, not all online form platforms are fully compliant with the Data Protection Act. Furthermore, data on protected characteristics needs to be stored securely and for a limited time. Lastly, it is important to indicate precisely on the online form the purpose for which the data is collected.³

The legal requirements associated with sensitive data differ from country to country and universities may have their own privacy policies, so we highly recommend to keep the university's legal team involved in the development and monitoring of the programme.

8 Timeline

Between 2020/21 and 2022/23, applications to AMP opened between September and October, depending on the year, and the mentor-mentee assignment was done in mid-November. This timeline allowed us to target two types of students: (i) those planning to apply to PhD programs in the current year, (ii) prospective applicants planning to apply the following year and seeking

³Our statement on our mentee form reads "Demographic information you provide to AMP may be shared with the universities' administrations, but only to monitor the success of the programme, and only after being anonymised and after the application round has passed. Mentors will only be provided their mentees' contact details and non-sensitive data such as the education of their parents."

advice on how to strengthen their curriculum in view of their application. We think there may be benefits to starting the mentoring even earlier in the year to ensure that mentees have sufficient time to action some of the advice they receive from their mentors.

9 The mentor-mentee meeting

Mentoring happens virtually and lasts for one hour. This one-hour, one-to-one meeting with a mentor is the amount of dedicated time that mentees expect to receive. Mentees are also allowed to send application materials to their mentors for review. If both parties agree, they can schedule one (or more) follow-up meetings. Mentors are not required to accept follow-up meetings, but in our experience, most end up having more than one meeting.

Mentors are responsible for contacting mentees. While most meetings were arranged smoothly, we were made aware of a few cases where one of the parties did not manage to contact the other. Sometimes, the email address entered by mentees in the sign-up form was incorrect. Our recommendation is to ask to fill in the email address *twice* in the application form. We would advise to make the mentors aware beforehand (for example in the training session) of the possibility that a mentee may not be reachable, or simply may not get back to them to arrange a meeting. If instead the mentor does not get in touch with the mentee, the mentee can send an email to a centralised email address managed by the AMP administrator.

10 What type of advice do mentors provide?

Mentors typically provide advice of four types: (i) logistical help with the application process, (ii) feedback on application materials, (iii) advice on how to strengthen mentees' curriculum for prospective applicants planning to apply the following year and (iv) share information about their experience applying to PhD programs and their life as a PhD student. Mentors provide information on the application process rather than advice on whether or not to pursue a PhD. Their role is to support candidates that have decided to apply to a PhD programme to get the best possible outcome, not to decide whether a PhD in economics is the right career path for a mentee.

11 Characteristics of mentees

Figures 1, 2, 3 and 4 provides data on the socio-economic and ethnic backgrounds of the first three waves of AMP mentees (2020/21, 2021/22 and 2022/23). Mentees appear to be much more diverse than the population of PhD students and faculty members in the five partner universities. Nearly half of all mentees had parents whose highest level of education was high school. 30% were

from Black backgrounds, 13.4% were from Asian backgrounds other than Indian and Chinese. However, applicants from Latinx or Arab backgrounds were not highly represented among AMP applicants (they made up 2.5 and 3.4% of the total, respectively). Finally women made up 42% of the applicant pool.

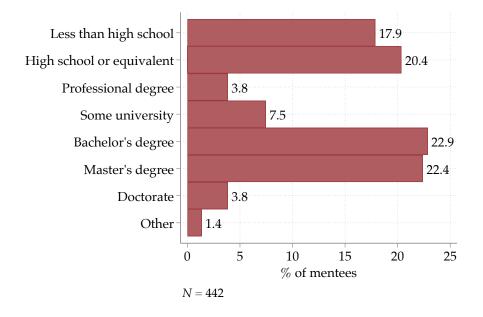


Figure 1: Highest level of education of mentees' parents or guardians

Notes: Data comes from the three mentee forms used in 20-21, 21-22 and 22-23

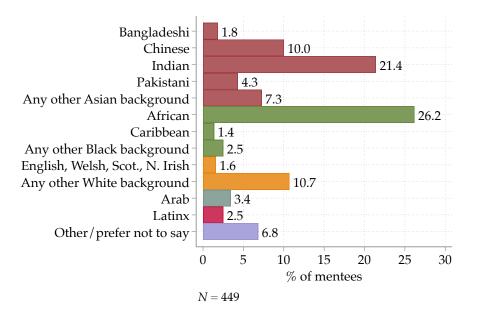


Figure 2: Ethnic background of mentees

Notes: Data comes from the three mentee forms used in 20-21, 21-22 and 22-23

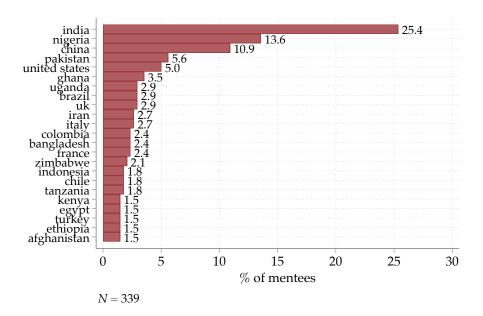


Figure 3: Country of origin of mentees

Notes: Data comes from the three mentee forms used in 20-21, 21-22 and 22-23

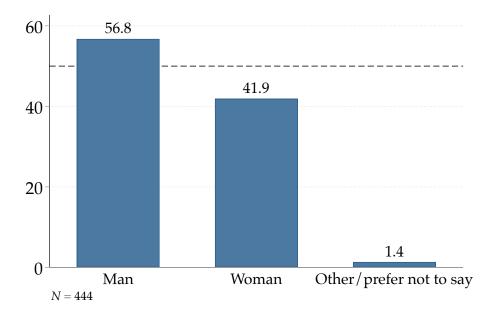


Figure 4: Sex/gender

Notes: Data comes from the three mentee forms used in 20-21, 21-22 and 22-23

12 Is it only information?

Could a mentoring programme like AMP be substituted by a set of materials to help applicants navigate the PhD application process? There are indeed quite a few resources available online that applicants can use (see for instance the advice provided by Jesse Shapiro and Susan Athey or collected in this page).

We think AMP is a needed complement to these resources, in particular for applicants from under-represented backgrounds. Survey evidence from a sample of mentors and mentees, as well as our own experience suggest that the personal connection and interaction with a mentor has been particularly beneficial to mentees. In addition to the tips on the application process, mentees reported finding the personalised feedback, as well as hearing about the personal experience of mentors especially useful. It appears that AMP is filling more than an informational gap.

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A Mentees form

Mentees join AMP by filling an online form, available on the AMP website. In case we are capacity constrained, the answers of this form are used to screen out prospective AMP mentees who are already familiar with the application process or who are currently enrolled in research-oriented universities. The form is reported below:

Thank you for your interest in the PhD Applicant Mentoring Programme (AMP)!

If you are currently considering applying to the MPhil/MRes/PhD programmes at Cambridge, LSE, Oxford, UCL or Warwick and would like to participate in AMP, this form will help us match you with a current PhD student to help you make your strengths truly shine through.

If you are applying for MPhil or PhD programmes at Cambridge this year please be aware that due to an earlier deadline on 1st December, we will have a deadline of the 18th November for those wishing to be mentored ahead of the Cambridge deadline. Please note that we cannot guarantee applicants submitting after the 18th November will be assigned a mentor ahead of the Cambridge deadline.

Please note that AMP is not designed for people who are already in contact with mentors in competitive departments. As our mentoring capacity is limited, we believe that applicants who are doing pre-doctoral fellowships (RA jobs) in research-oriented universities or who recently obtained degrees from such universities should not apply to join AMP. Of course, if you think that you should join AMP because of exceptional circumstances, please fill out the form and explain these circumstances clearly.

Please note that applications will be considered by members of all five institutions.

AMP is completely independent from the admission process. Participation in AMP will not affect how your application is reviewed by the admissions committees. Demographic information you provide to AMP may be shared with the universities' administrations, but only to monitor the success of the programme, and only after being anonymised and after the application round has passed. Mentors will only be provided their mentees' contact details and non-sensitive data such as the education of their parents.

If you have any questions, please send them to econ.amp@gmail.com.

- 1. Name
- 2. Email address
- 3. Undergraduate university
- 4. Undergraduate major
- 5. Postgraduate university (if applicable)
- 6. Postgraduate major (if applicable)
- 7. Sex/Gender

- 8. Ethnic background(s). Please select more than one if appropriate⁴
- 9. What is the highest level of education any of your parent(s)/guardian(s) has received?
- 10. Do you have a mental or physical disability?
- 11. Which country(ies) do you come from?
- 12. When do you plan to submit your PhD applications?
- 13. When is your earliest application deadline date?
- 14. Which area(s) of research are you most interested in?
- 15. If you are selected to participate in AMP, would you like to be matched with a particular mentor? For example someone who comes from the same country or continent as yours, someone of the same sex, etc.
 - We cannot guarantee that we will be able to satisfy everybody's preferences, but we will take your preferences into consideration when we can.
- 16. Please briefly describe why you are interested in participating in AMP. Also describe how your background makes you feel disadvantaged in the PhD application process.
- 17. When preparing PhD applications, how much support can you currently get (from 0 'Not at all', to 5 'a lot')
 - In your last/current university?
 - *From your last/current supervisor? (for instance your employer)*
 - From your family?
- 18. How well do you think you understand the PhD application process in economics? (from 0 'Not at all', to 5 'a lot')
- 19. Please leave any additional comment that you would like us to be aware of in the space provided below.
- 20. How did you learn about AMP?
 - If "Other", please describe how you heard about AMP.

B Feedback questionnaire for mentees

We sent two separate questionnaires to mentees: a placement one and one asking for feedback.

⁴This is a multiple choice question. We used the list of ethnic backgrounds used by statistical agencies in the UK as options. They are: Arab, Asian - Chinese, Asian - Bangladeshi, Asian - Indian, Asian - Pakistani, Asian - Any other Asian background, Black - African, Black - Caribbean, Black - Any other Black background, White - English, Welsh, Scottish, Northern Irish or British, White - Gypsy or Irish Traveller, White - Irish, White - Any other White background, Any other ethnic group, Prefer not to say

B.1 Placement questionnaire

- 1. What's your name and last name?
- 2. Which programs did you receive admission to?
- 3. Which programme did you choose?
- 4. If you are not starting a PhD this fall, what are your plans for the incoming academic year?

B.2 Feedback questionnaire

- 1. Did you apply to any PhD programme this year?
- 2. (Only if you did apply), which schools did you receive an offer from?
- 3. (Only if you did apply), will you start a PhD in autumn 2022?
- 4. What hurdle(s) did you face in the application process that led you to apply to AMP?
- 5. Now about AMP: What aspects of AMP did you find most helpful for your application process?
- 6. On a scale from 1 to 5 (where 1 = "not useful at all" and 5 = "extremely useful") how helpful did you find AMP?
- 7. Which university was your mentor at?
- 8. Is there anything else AMP helped you with?

C Other mentoring initiatives

- Application Assistance and Mentoring Program
 - Run by graduate students at Harvard and MIT.
- Graduate Mentorship Program
 - Run by graduate students at Duke.
- Graduate Applications International Network
 - For African scholars.
- The Women in Economics Initiative
 - For women and non-binary economists.
- Research in Color Foundation
 - For historically excluded groups.