



Launching a Holistic Student Support & Scholarship Program

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Abstract

Initial cohort selection for a NSF DUE funded, holistic student support and scholarship program began in late 2020. Programmatic elements include a scholarship, a summer bridge program, and weekly embedded mental health sessions among other elements. The program was developed from ideation, which provided the opportunity to rethink the scholarship application process, and a holistic, semi-blinded application process was created.

The selection process had two rounds: a blind first round and a second round interview. A bias and blindspot training was developed to prepare the selection committee for the review process, and all members were required to participate in this training. In the first round, all applications were redacted of any wording related to race, gender, sex, and other personal identifiers. The second round interviews were conducted over Zoom. For both rounds, a rubric was developed to look for specific applicant characteristics such as grit, teachability, open-mindedness, as well as other traits.

The results of the selection process yielded a cohort with the following characteristics. Regarding self-identification of sex, the application pool consisted of 41% women, and 60% of students who were invited to apply for the scholarship self-identified as women. Of those who submitted applications to the program, 40.7% were women. The final program cohort was 42.8% women. With respect to BIPOCs, 26.5% of the application pool identified as BIPOC, and of these, BIPOCs comprised 16.67% of the submitted applications and 42% of students who accepted the offer were BiPOCs. Our results suggest that the process used to invite and interview students was successful at recruiting a diverse cohort.

1. Introduction

A newly funded scholarship and student support program created a chance to rethink the application process for academic programs. This program targets low-income, academically-gifted students. For some, low-income equates to students of color or students from urban areas. However, low-income students come from all geographic regions and consist of all races and ethnicities. Additionally, academically gifted students are distributed across the country and not just in affluent areas. The challenge in our admission process is to avoid the classical rubrics attached to low-income and academically gifted descriptors.

This paper will describe the process for creating an application process that is useful for practitioners creating a new program at small and medium institutions of higher learning. The logistical work can be carried out by one person, and the application review process can be executed by a selection committee.

2. Getting Started

The first step in creating the application process is to define what type of applicant you are seeking and the type of evidence that can be gathered by either a process or artifact. Some characteristics the MACHS Scholars Program was seeking in our candidates included: resourcefulness, grit, open-mindedness, ability to work in teams, and teachability. Next, one must decide what evidence can be used to evaluate those desired traits.

An example of a process to determine resourcefulness is to have students create a digital portfolio. For instance, a student could create a vlog organizing five or more people doing a community service project. This digital portfolio could be used to evaluate the applicant's organizational, leadership, teamwork, presentation, and communication skills. The length of the video could be limited to reduce the review time in the evaluation process. Other artifacts could include items such as essays and products from the digital portfolio noted above. Regardless of the chosen processes and artifacts, consideration of how applicants will have access to the resources to produce required application materials must be considered. In addition to any assistance and accommodations that will be provided in the application process.

2.1 Barriers

Submitting applications requires resources that many administrators may not consider. The most critical is marketing. Who is made aware of the opportunity and how? Resources you may have at your institution are the offices of financial aid, admissions, communication, and K-12 outreach. More passive resources may include websites belonging to different offices and other departments. It is advantageous to create partnerships with these offices. For this strategy, a one-pager of the program was created and shared with these partners and the Board of Trustees. Additionally, regular meetings with admissions and financial aid offices were held throughout each application period. Furthermore, efforts were made to understand the demographics currently served by these departments, and a plan was created to fill those holes. Our strategy was to look at the last admitted class and look for areas in New England that are underrepresented in that class. The PIs then contacted guidance counselors and STEM educators at schools in those underrepresented areas.

Once an applicant is made aware of the program, there may be barriers to complete the application. Using the digital portfolio from above as an example, one possible barrier could include access to technology. Does an applicant have access to a digital camera via a smartphone, tablet, camera, or computer? If not, can an old smartphone with a camera be sent to students who requested them? It may be possible, at your institution, to request old devices that have been factory reset for this purpose. Once an applicant has the adequate hardware, will they have the appropriate software to create content? Links to free software and tutorials can be shared via a website or in an invitation to apply letter.

Although it is impossible to remove every barrier, the goal is to consider the most common obstacles students may face, and to make an effort to level the on-ramp to apply. Other barriers can be identified in surveying the application process with the selected cohort.

2.2 Evaluation

2.2.1 Biases and Blind Spots

Cognitive biases are mental shortcuts and errors in processing information that we perceive. There are many types of biases. One example is confirmation bias, where one is looking for information to support one's beliefs and rejects any new information that does not agree with their existing beliefs. For example, this can appear in evaluations if a person believes that people of Asian descent are smart and will make good engineers. Another example is anchoring bias, the tendency to believe initial information. For example, suppose the opening paragraph of an essay is persuasive, and you believe the student to be a qualified candidate, you will ignore any other evidence that might suggest otherwise. There are many

more biases and blindspots. In the selection process for the MACHS Scholars program, all evaluators were trained with the free online resource created by pwc [1].

To further reduce bias and blind spots, the first round of the selection process was blind. All information relating to race, gender, geography, age, school, and sexual orientation was redacted from all application components, including transcripts and essays. Evaluators scored students based on a rubric designed to identify students with grit, open-mindedness, teamwork, and resourcefulness.

2.2.2 What Are You Evaluating

Consideration must be given to evaluations. For example, when evaluating essays, a concern may be, who really wrote this essay? Students with resources may have access to editors and writing services, which will allow them to produce a higher quality essay than they would produce on their own. In some extreme cases, parents will write essays for their child. What about students where English is a second language: should grammar and syntax be the most important factor? Or, should ideas and evidence be the primary consideration? If an essay is a heavily weighted artifact, it may be a good idea for your program to consider the ideas and evidence presented in the essay. Additionally, careful consideration must be given to the essay prompts to tease out the characteristics your program is seeking in its candidates. For this program, grit, open-mindedness, ability to work in teams, and teachability were among the traits candidates should have for the MACHS Scholarship program.

3. Results

After applying the selection process outlined above, our first cohort is described below. Regarding self-identification of sex, the application pool consisted of 41% women, while 60% of students who were invited to apply for the scholarship self-identified as women. Of those who submitted applications to the program, 40.7% were women. The final program cohort was 42.8% women. With respect to BIPOCs, 26.5% of the application pool identified as BIPOC, and of these, BIPOCs comprised 16.67% of the submitted applications and 42% of students who accepted the offer. Our results suggest that the process used to invite and interview students was successful at recruiting a cohort representing a diverse community.

Acknowledgements

This material is based upon work supported by the National Science Foundation under Award # 2030533. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

References

[1] PricewaterhouseCoopers, "Blind spots," *PwC*. [Online]. Available: <https://www.pwc.com/us/en/about-us/blind-spots.html>.