

## Diversity Statement

Alex Youcis

email: [alex.youcis@gmail.com](mailto:alex.youcis@gmail.com)

website: <https://sites.google.com/view/alex-youcis/>

Growing up in a, low-diversity, socially conservative town in Pennsylvania, I have had a lot to learn about the undeniable strength that diversity can bring to an academic environment, and about the struggles that those from a diverse background can face. I have been lucky enough to have personal experiences and to have connections with others that allowed me to learn, and continue to learn, more about EDIB (equity, diversity, inclusion, and belonging) inside and outside of academics.

To me EDIB means the following thing.

**Equity:** Equity is the goal of achieving across-the-board opportunity for the success and advancement of people from differing backgrounds. Equity is also the acknowledgment that not everyone has started from an equal place, and that membership in certain underserved groups is an important consideration in the path towards equality of opportunity.

**Diversity:** Diversity is the recognition that the human experience is broad, and the differences in experience and background matter in both personal and academic contexts. This can include differences in race, religion, ethnicity, sexual orientation, gender identity, neurodiversity, ability and disability, and many more, as well as intersectionality that occurs between these various identities.

**Inclusion:** Inclusion is the understanding that people of all kinds are part of the story. Considerations of this inclusion can consist of diverse representation in images on campus (both of a social and academic nature), but also in the choice of material discussed within classes. In the mathematical world, an example of inclusive classroom material could take the form of acknowledging the contributions of mathematicians from diverse groups often ignored when discussing the history of important mathematical ideas.

**Belonging:** Belonging is the creation of an environment where all people can feel that they are not only included in an academic or social space, but that their voice and experiences are given equal weight and appreciation as others occupying the space. Creating an environment of belonging is not a passive pursuit. It requires the active participation of faculty, students, and staff to foster a welcoming environment. This can come in the form of identifying and eliminating subtly exclusionary language and attitudes, but also encouraging the contribution of each individual involved, and assuring them that they are a valued member of the group.

It is my belief that upholding EDIB principles is a moral imperative for anyone occupying an educational space. It is also my belief that the act of progressing towards a more EDIB-forward academic environment is key for an optimally healthy and successful academic space. The principles of EDIB allow for those involved to not only express and utilize the full spectrum of their skills and experience, independent of their origin, but to be in a mental state where they are happy and willing to do so.

In my past roles as an educator, I have always striven to demonstrate the EDIB ideologies.

- I am a co-founder and previous administrator of the Berkeley chapter of the [Directed Reading Program](#). As an organization, we sought to encourage those of all backgrounds to participate, giving focused encouragement to those from underserved groups.
- In my roles as an assistant instructor and an instructor of record, I gave careful consideration to creating a warm and welcoming environment. I made it clear that my time was available to all those that wanted it, independent of what their background (mathematical or otherwise) or concern was. I also made efforts to foster interconnectivity between the students via group work and shared-homework assignments.

These experiences were quite fundamental in forming my current understanding of EDIB.

For example, in some of my earlier educational roles, I had students come to me and express discomfort concerning some aspects of classroom activities. I am quite fond of grouping students together in small sets, having them take turns to explain a problem they are struggling with, and collaboratively coming to a solution. A student approached me after one class and explained to me that she was neurodivergent, and that she found this method of learning uncomfortable and counterproductive. Together we brainstormed ways to adapt the method to better suit her learning style. We ultimately settled on having her prepare a written version of her explanation in advance to share with the other students in this group. This approach worked quite well, and highlighted to me the importance of being open-minded to unintended exclusionary teaching methods, and the importance of creative solutions to achieve equity.

I hope to be part of an academic environment that fully supports EDIB principles, and allows me to grow and understand the application of those principles. Here are some EDIB-related programs, influenced by my personal experiences, I hope to take an active role in shaping at my future institution.

- (1) It is an empirical fact that international talent is key for the success of a country both internal and external to the academic realm. It is my belief that the academic community needs to redouble our efforts to be welcoming and supportive of those international students brave and determined enough to leave the comfort of their home country to study abroad.

Over the last six years, through the experiences of my life partner, a non-citizen woman of color in mathematics, I have witnessed how US governmental policies have disadvantaged her from pursuing her goals. Even when these policies don't explicitly prohibit such students from pursuing various opportunities, they make the barrier of entry much higher, requiring an exhausting number of hoops to jump through. This is clearly an issue of equity. On a personal note, having lived in several countries during the pursuit of my own academic goals, countries with vastly different linguistic and cultural fabrics than my own, I have experienced these difficulties first-hand. Finding an apartment in a foreign country where you are not fluent in the language, and dealing with governmental inquiries related to immigration, can both be harrowing and demoralizing experiences, distracting from one's academic goals.

Based on these experiences, I would like to personally contribute at the campus-wide level, and within my own department, to the creation of infrastructure making resources available to helping international students with these issues. This could include more support when moving to my institution's country of location. For example, recruiting volunteer advocates to help navigate visa issues, leasing contracts, and similar difficulties faced by people upon initial entry into a country. Similar support could be provided upon graduation, helping make the difficult transition into the workforce.

- (2) While strides have been made in recent years towards promoting an environment of greater inclusion and belonging for all people in mathematics, I still feel there is opportunity to improve. While much effort has been made to increase inclusivity, resulting in the hiring of faculty and the acceptance of more students who are non-binary or identify as women, there is a lag in fostering belonging. I have again heard directly from such mathematicians (including my life partner) that they often encounter language and organizational set-up that feels discouraging to them. I have myself (regrettably and unintentionally) used language which was unwelcoming. In an effort to prevent others from making the mistakes I once made, I wish to develop seminars within my department where frank and open discussions leading to understanding of how unconscious biases may create exclusionary environments, and how this can be avoided.

In addition, taking feedback from my mathematician friends who are non-binary or identify as women, I feel as though the culture of non-belonging in mathematics starts much earlier than university. In fact, it seems that the insidious seed of 'math is for men' is implanted at a much earlier age, essentially making the discussion partially moot by the university level. For that reason I would like to develop outreach programs to local middle and high schools with the goal of emphasizing the universality of STEM jobs, and seeking to emphasizing that people of all types can play a role in, as well as benefit from, science and mathematics.

- (3) Mentorship is incredibly important to me, on both a professional and personal level, and I believe in it as an incredible tool to help increase diversity within the mathematical community. I am very interested in running mentorship programs like the Directed Reading Program, or REUs, which provide an ideal environment to support underserved groups.

I think these programs can serve as tools to get historically underrepresented groups interested in mathematics at an earlier age, reducing the chance for cultural and societal biases to take hold. One approach might be a modified version of the Directed Reading Program catering to younger college students, who may feel as though mathematics is 'not for them', but who are interested in exploring what mathematics has to offer in a supportive and low-consequence environment. This could be quite helpful, as worries about mathematical shortcomings are hard to overcome when one's grades are on the line and in large classroom environments. Both of these issues are addressed by the DRP model. We may even consider the idea of extending this to the mentorship of high school students from underrepresented groups who feel that, although they are smart, that 'people like me don't do math'.

While the above are specific ideas I have for demonstrating EDIB values, I believe the most important concept is to keep an open mind. I consider forwarding these ideas wherever I go an essential aspect of a modern educator, and I am open to adjusting my approach and my focus to accommodate whatever diversity of challenges exist at my particular institution. I believe that I have only started the journey towards understanding and practically implementing the ideas and values inherent in EDIB, and am determined to continue this quest for as long as I am privileged enough to fulfill an educational role.