

# Undergraduate students who find peers “like me” report higher levels of belonging and flourishing in their STEM majors.



## #2100155: Staying in Science: Investigating STEM Persistence Among High School Youth



**Belonging**

Good et al., 2012

+

**Flourishing  
in  
STEM**

- membership:**  
the sense that you feel connected to and part of the community of your major
- acceptance:**  
the sense that you are valued, respected, & accepted in of your major
- the sense of well-being:**  
that you are moving steadily forward on a stable path



## Peer relationships play a central role in students’ sense of belonging in STEM.

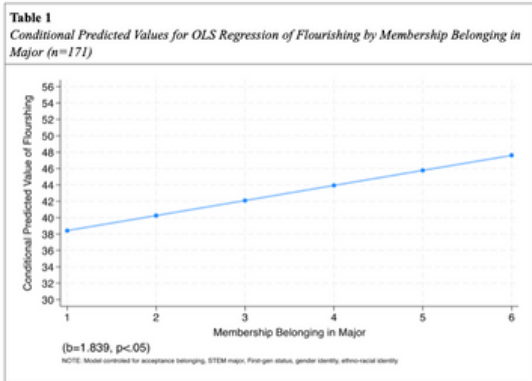
Group project opportunities enabled finding “a group of friends that I could relate to, and that were also interested in doing careers in health care, but also peers that wanted to get to know me.”  
-Manuel, Health Sciences, Black/Hispanic male

“I didn’t really have any social experiences with people in my major and tended to have to study by myself because I didn’t know anyone.”  
-Stephanie, BioEng Major, Black female

**Membership belonging had a stronger relationship to flourishing than acceptance belonging.**

This pattern did not vary across majors, including STEM and other-than-STEM majors.

Having a sense of acceptance belonging to one’s STEM major in the context of peer relationships may not necessarily lead to feelings of membership belonging to a STEM academic community at their colleges.



Students reported strategies they engaged in to find peers “like me” to support their sense of belonging:

- collaborative coursework
- acknowledgement of “shared struggle”
- validating concerns
- clubs and programs



## Mixed Methods

- 10-Year STEM Pathways Study of N=358
- 2 Annual Surveys on factors that support persistence
- Annual Interviews with N=30
- Longitudinal modeling & grounded theory approach to exploring the supports & barriers of STEM pathways for students from communities historically underrepresented in STEM

## Challenge Area Overcome



- consent for cell phones!
- consistent contact via the same individuals over time (creates relationships)
- monitoring of changes to contact information
- increases in stipend payments over time
- sharing findings via social media & visual methods

**Maintaining connection over 10 years**  
Survey response rate: generally 68-75% annually  
Interview retention rate: 99%



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