

## Abstract

The Molding Melanin Magic Mentorship Program is an organization seeking to empower minority female high school students at the Texas Academy of Biomedical Sciences (TABS) through in-depth mentorship regarding apply for college, professional school, and pursuing a career in STEM. With the guidance of TCU's Pre-Health Institute, the program connects high school and college students with similar interests and provides an engaging curriculum of workshops and activities to bolster information received in the classroom setting. Alongside mentorship, the program's research utilized group audio recordings, which were analyzed to capture motivations and themes of mentees and mentors during facilitations. The initiation and development of near-peer relationships were widespread among participants and extended beyond facilitations, emboldening participants to apply for college and pursue a career in STEM.



## Background of the Community

The Texas Academy of Biomedical Sciences was established in 2011 as a public Early College High School. TABS seeks to provide students who are interested in biomedical-related areas of study an opportunity to engage in rigorous curriculum while also gaining hands-on experience in their field of interest (Campus Profile). A majority of students attending school in Fort Worth ISD are from minority backgrounds. At TABS specifically, the minority enrollment is 88%, so this institution serves a place to generate a significant impact on underrepresented population in STEM (Public School Review).

## References

### School Information / Campus Profile

Profile, <https://www.fwisd.org/domain/2648#:~:text=Founded%20in%202011%2C%20the%20Texas,careers%20and%20areas%20of%20study.>

"Texas Academy of Biomedical (2023 Ranking) - Fort Worth, TX." *Public School Review*, <https://www.publicschoolreview.com/texas-academy-of-biomedical-profile#:~:text=67%25%20of%20Texas%20Academy%20Of,are%20Two%20or%20more%20races.>

## Methods

### Mentor-Mentee Ratio:

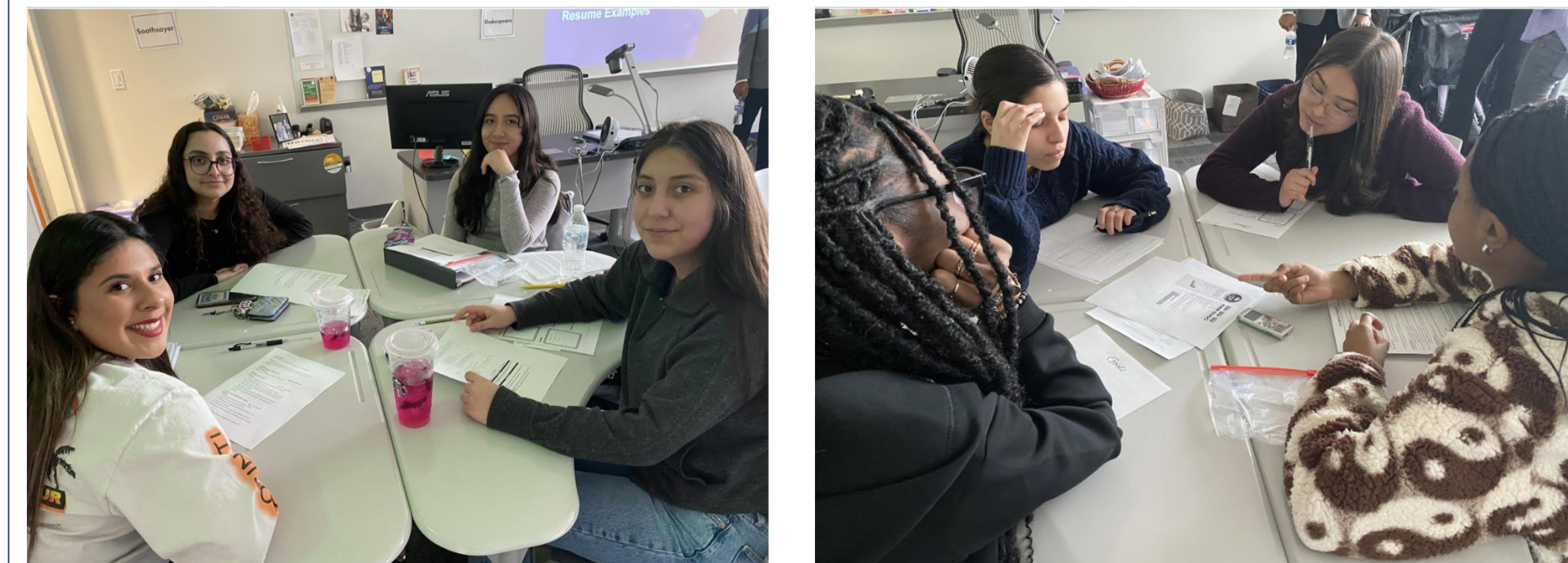
Each mentor is paired with 2-3 high school students during small group sessions. In these small groups, mentors provide guidance, encouragement, and support to mentees associated with meeting topics. Additionally, TCU Pre-Health students serve as a mentor outside of meeting times by keeping an open line of communication with their mentees to help with their unique difficulties throughout their educational journey.

### Meeting Topics:

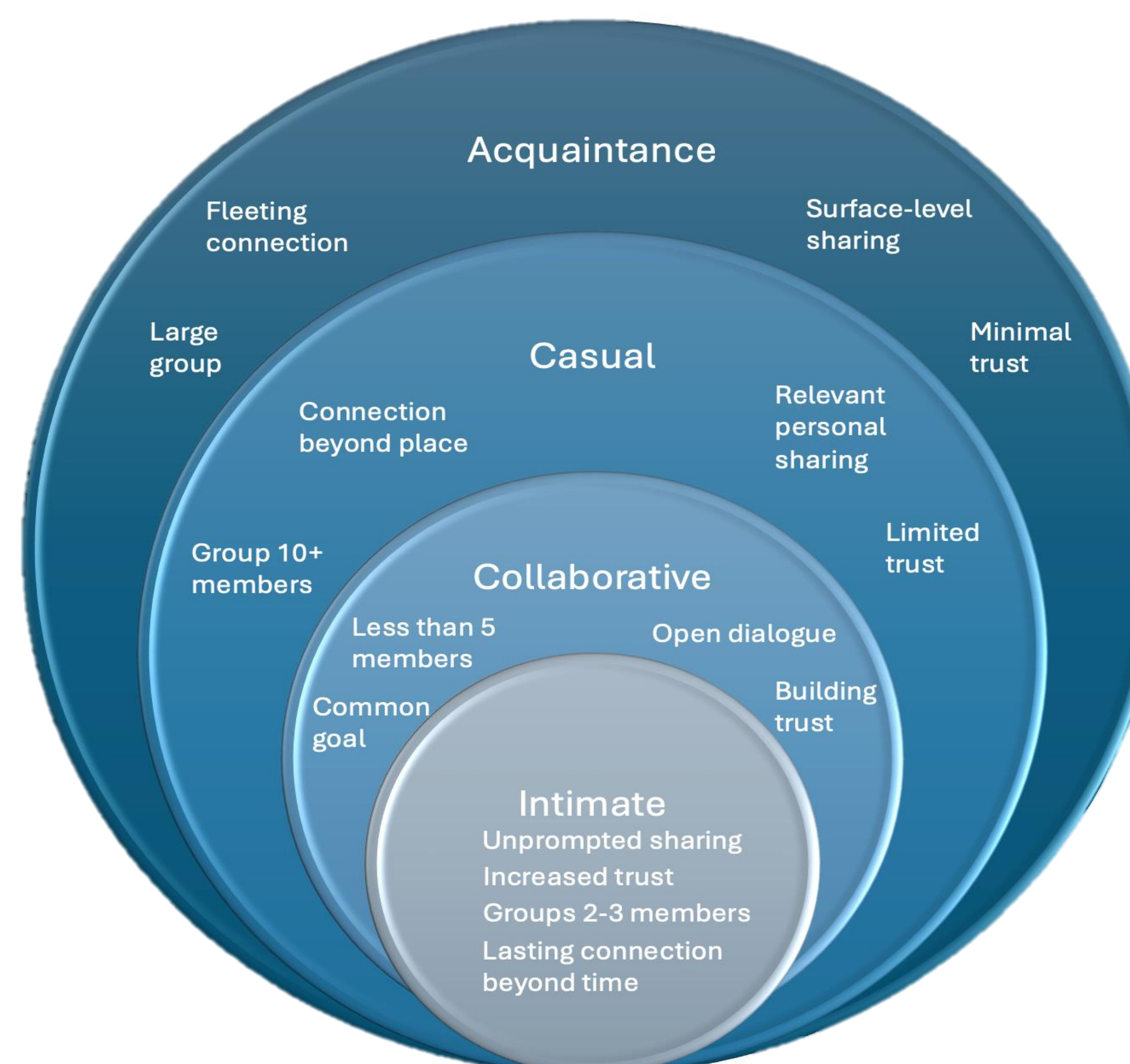
Resume Building, Vision Boards, STEM Faculty Panel, STEM Career Presentation, Financial Literacy, and College Applications

### Data Collection:

Audio recorders were assigned to each group to capture conversations. The content of these conversations was coded for different themes including financial insecurity, near-peer relationships, familial pressure, free talk, and attitudes toward education.

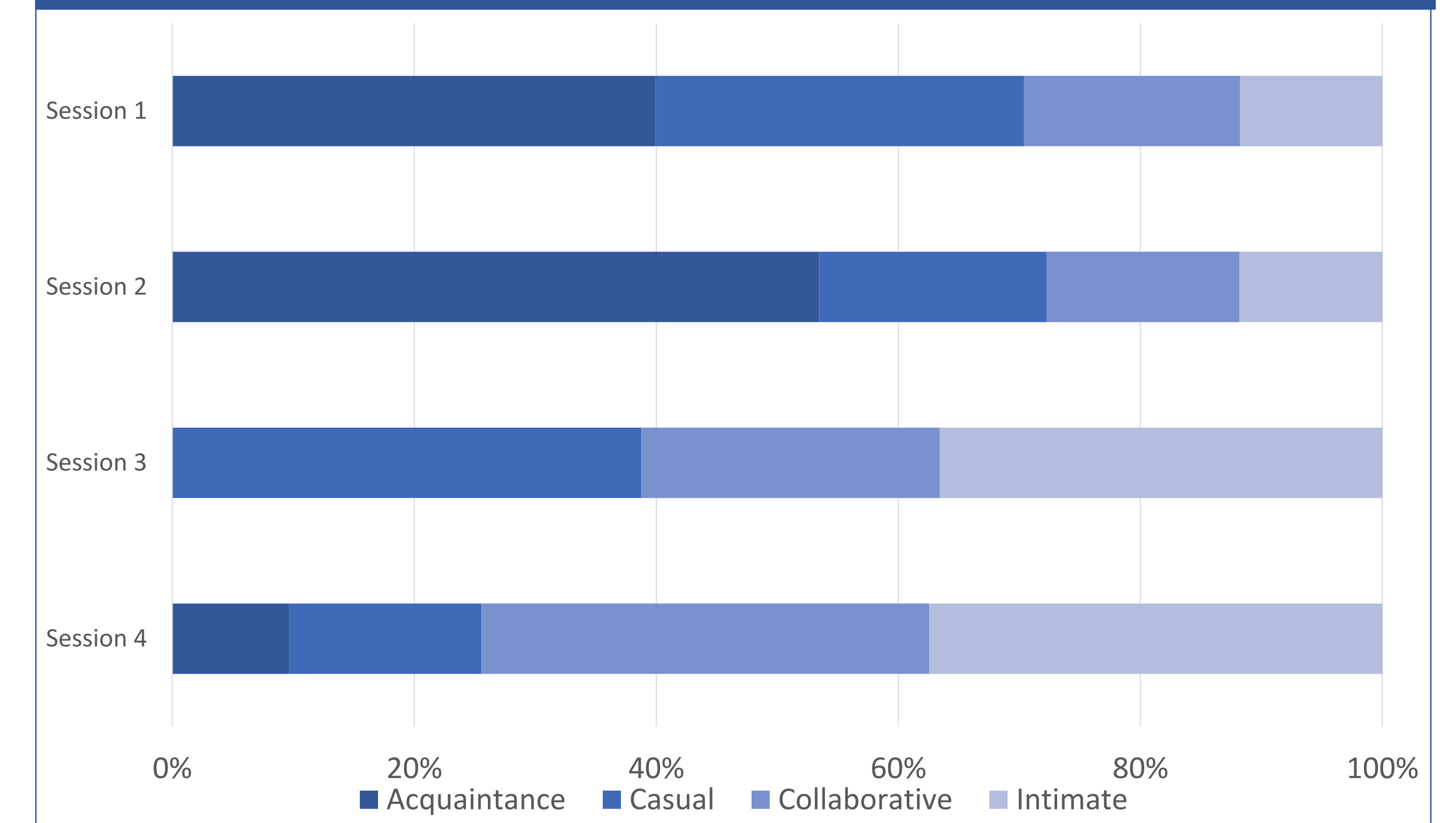


## Levels of Relationships



Adapted From: <https://www.hakimasadi.com/post/adult-friendships> and <https://9by9solutions.com/2014/08/should-a-leader-be-friends-with-staff/>

## Increased Intimate Conversation Level with Subsequent Facilitations in High School Mentorship Program



## Pertinent Quotations

Acquaintance	"How is your day going?" – Session 1 "Have you taken the TSI yet?"- Session 2
Casual	"At first I wanted to go into pediatric oncology, but now, I want to be either a pediatrician or child psychologist"– Session 2
Collaborative	"If you ever need help, you guys, if you want my number." –Session 4 "Honestly, it was the last school on my list. But when I got the financial aids... I was like yeah, I might as well"- Session 3
Intimate	"I wanted to go to school in California so bad, but you know, just financially it was better to stay at home" - Session 4 "I am engaged... they (parents) kicked me out. I'm living solo right now."- Session 5 "I felt like if I didn't come here, I failed her (mom). So, I kind of forced myself to come here."- Session 2

## Discussion

As the meetings progressed, the participants moved beyond surface-level conversations and began disclosing more private details about their lives. This is expressed by the increase of intimate conversations from Session 1 to Session 4. Based on these results, the program is interested in understanding how and if these intimate relationships might persist beyond the structure of the mentoring program. The program would seek to discover if these same trends can be replicated in a different cohort. It was found that time and divulgence were directly proportional. Further studies will be conducted to evaluate content mastery and confidence and its potential relationship with divulgence. Development of intimate conversations fosters increased trust and encourages students to carry lessons and relationships beyond its original setting.