You Belong in STEM! Video Project

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  - Kayla Baselj* (Chemistry, May 2025 graduate)
  - Ryan Lin (Mathematics, rising SR)
  - Solomon (Sully) Clark (Applied Mathematics, Dec 2024 graduate)
  - Abyss (Kriisa) Halley (Physics, May 2025 graduate)
  - Emily Holliman (Horticulture, May 2025 graduate)
  - Caitlyn Staiger* (Forensic Chemistry & Chemistry, SR)

  - Dr. Stanley Hileman (Physiology & Pharmacology)
  - Dr. Jeremy Dawson* (Electrical Engineering)
  - Dr. Tobi Odeleye* (Chemistry)
  - Michelle Paden* (Student Success & First Gen Office)

Logistics

- Worked with WVU University Relations (UR).
- Interviewed students were engaged in research during Summer 2024 with most presenting at WVU's 2024 Summer Undergraduate Research Symposium.
- Interviews took place at the Symposium venue (end of July 2024).
- Crowdsourced advice on interview questions at a First2 Steering Committee meeting.
- Michelle Paden and I asked the interview and follow-up questions with UR responsible for videoing and compiling the interviews into the different areas.
- Interview responses were compiled into five different "You Belong in STEM!" videos involving resources, advice, undergraduate research, roadblocks, and career goals.

Interview Questions

- Discuss a roadblock to your STEM (science, technology, engineering, mathematics) education and how you overcame it.
- If you struggled academically in a STEM class, how did you overcome the challenges and what resources did you use?
- What is one piece of advice you would give to other students like you for succeeding in their STEM majors and/or college in general?
- What was one thing other students seemed to know about college that you did not? How did you overcome this lack of knowledge about college?
- College affordability is a big issue, and finances prevent many from even attending college in the first place. How did you overcome the financial issues associated with attending college?

Interview Questions (cont.)

- Take us through your thought process of figuring out your career path post-undergraduate.
- What aspects of college helped you maintain a good balance between your social and academic lives and what do you recommend for current college students?
- At times, families do not understand the academic environment and/or its time constraints (e.g., the relative value of different majors, engaging in unpaid academic experiences, studying on weekends, not taking vacation during the academic year). How did you navigate discussions with your family to educate them about academia?
- What is your current position at WVU? What are your major duties and responsibilities in this position? Is this what you wanted to be when you were 8-years old (and what did you aspire to be career-wise at 8-years old)?

You Belong in STEM! Videos

- https://youtu.be/z7XDnI-Qtxg: You Belong in STEM! Resources
- https://youtu.be/Hd7DnaF4pHs: You Belong in STEM! Advice
- https://youtu.be/5GAGWOTfmDA: You Belong in STEM! Undergraduate Research
- https://youtu.be/lU1Qd0AMdhc: You Belong in STEM! Roadblocks
- https://youtu.be/hzdDj_hqUZY: You Belong in STEM! Career Goals

Study: Data Analysis Tables

Mean student responses (fall 2022, fall 2023, and fall 2024) for Likert statements related to the biweekly opportunity emails. Three-point Likert scale (Agree = 3, Neither Agree nor Disagree = 2, and Disagree = 1).

Likert Statement	Mean Response (n = 30)
The biweekly emails helped to connect with other First2 participants at WVU.	2.2
The biweekly emails helped to connect me to the First2 Institutional Team (faculty, staff, and student directors/co-chairs).	2.4
The biweekly emails helped me identify resources necessary for my success in college.	2.7
The biweekly emails encouraged me to engage in career planning.	2.6
The biweekly emails helped me to understand ways to be more involved with the campus community.	2.7
The biweekly emails assisted me in finding opportunities to enhance my education outside of structured classes.	2.6
The biweekly emails made me more positive toward majoring in STEM.	2.6

Study: Data Analysis Tables

Mean student responses (fall 2022, fall 2023, and fall 2024) for Likert statements related to the *Belonging in the STEM Community*. Five-point Likert scale (Strongly Agree = 5, Neither Agree nor Disagree = 3, and Disagree = 1).

Likert Statement	Mean Response (n = 30)
1: I feel accepted in my campus's STEM community.	4.6
2: I feel I fit in with my campus's STEM community.	4.6
3: I feel comfortable in my campus's STEM community.	4.5
4: I feel respected in my campus's STEM community.	4.4
5: I feel a sense of belonging in my campus's STEM community.	4.3
Sub-total (Belonging in STEM Community)	**22.4**

Study: Data Analysis Tables

Mean student responses (fall 2022, fall 2023, and fall 2024) for Likert statements related to the *Belonging in Science/Mathematics Classes*. Five-point Likert scale (Strongly Agree = 5, Neither Agree nor Disagree = 3, and Disagree = 1).

Likert Statement	Mean Response (n = 30)
6: I feel I fit in when I am in science and mathematics classes.	4.3
7: I feel respected when I am in science and mathematics classes.	4.5 (*n* = 29)
8: I feel a sense of belonging when I am in science or mathematics classes.	4.3
9: I feel accepted when I am in science or mathematics classes.	4.4 (*n* = 29)
10: I feel comfortable in science or mathematics classes.	4.2
Sub-total (Belonging in Science/Mathematics Classes)	**21.8** (*n* = 29)

***My experience with the biweekly emails has positively influenced my sense of acceptance and belonging at college* (avg. 4.2 of 5, n = 30).**

Spring 2025 Student Comments

I find internships at other institutions to be the most interesting and useful. It is difficult to find this information elsewhere.

I just liked all the different information and links that told me different opportunities I otherwise wouldn't have known about.

I liked to read what was available to do, and I liked that it was sorted into Morgantown and out-of-town options. That helps organize what can be manageable for students without the ability to pay to up and leave for a summer.