

## Discussion Questions

### “Proud to Be Different in STEM” from *Science News for Students*

**Q1: What did Bryce Hughes find in his research about why LGBTQ+ students decide to quite their STEM careers?**

- “Students can get discouraged if other people exclude them or question why they’re in STEM.”
- “Hughes found that students who identify as sexual minorities (LGBQ) were less likely than straight students to make it to the fourth year of a STEM program. For every 100 straight college students who made it, in fact, only 90 LGBQ students did.”

**Q2: What are some potential reasons for this?**

- “Feeling alone, unwelcome or unsupported may be one reason. Another, he says, may be due to gender stereotypes. These are beliefs about how men and women should dress or act. Many people view gay and bisexual men as more feminine than straight men. Because of that, some people may discourage them from working in fields seen as more masculine, such as engineering.”

**Q3: What were some of the main findings from the Queer in STEM survey?**

- “This second survey recently found that about 60 percent of LGBQ scientists and engineers were out in their personal lives. But only 16 percent of them were out at work. That means they had to go back “into the closet” every day, or keep their sexual orientation a secret. The more welcoming and safe their workplace felt, though, the more likely they were to be out. Even so, LGBQ people reported being harassed and hearing mean comments at work about sexual orientation more often than straight people did. A separate part of the survey looked specifically at transgender and gender nonbinary scientists, and found similar results.”

**Q4: What are some challenges LGBTQ+ people still face?**

- “In seven states, for example, teachers can’t discuss LGBTQ+ topics in the classroom in a positive way. That means some students may never know how

much of a trailblazer astronaut Sally Ride was. She was the first American woman in space and a lesbian who had a Navy research ship named after her. They may not learn the full story about British math genius Alan Turing either. During World War II, Turing invented a machine that solved the “Enigma” code the Nazis used to send secret messages. Turing’s efforts helped the Allies win the war, but he was later arrested for being gay.”

**Q5: What were some of the main findings from the STEM Inclusion Study?**

- “A project called the STEM Inclusion Study recently partnered with 17 professional groups to survey people who work in STEM fields. The survey found that LGBTQ people work just as hard and are just as educated as other members. Even so, the survey found that LGBTQ scientists and engineers didn’t receive as much help and their work wasn’t valued as much by others. That’s like having less time to finish a quiz than your classmates and then getting a worse grade for the same answers. As a result, LGBTQ+ people said they were more likely than their straight peers to want to leave their STEM careers.”

**Q6: According to Angel Kaur, what is one of the most powerful tools we have for encouraging LGBQ students to stay in STEM careers?**

- “Some LGBTQ+ students and researchers have to deal with hurtful comments and discrimination. But seeking out and talking to friends and allies — whether supportive students, researchers, mentors or local or national groups — can buffer them from the worst. ‘There will be things said that may be upsetting,’ Kaur acknowledges. “But that community — there’s so much power in that.”