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Table 1. Common Objections to Gender-Inclusive Biology Teaching

Objection	Response	Resources for Community Engagement
<p>“Gender, sex, and sexuality are not in the biology curriculum.”</p>	<p>Teaching about gender, sex, and sexuality falls squarely within the guidelines of the NGSS as demonstrated through several examples in this article.</p> <p>LGBTQ+ students are present in every classroom whether openly or not, and the NGSS gives a clear directive to include students from diverse gender backgrounds.</p>	<p>NGSS Appendix D - "All Standards, All Students" asserts that “To engage all students in learning the NGSS, it is important to understand the context that influences science learning by diverse student groups.”</p> <p>In addition, “Science teachers need to acquire effective strategies to include all students regardless of racial, ethnic, cultural, linguistic, socioeconomic, and gender backgrounds.” One particularly effective strategy is the use of Science and Engineering Practices in tasks such as social activism projects.</p>
<p>“This will be too complicated and confusing for our students.”</p>	<p>Students find complexity to be interesting and motivating. In our experience, lessons involving gender, sex, and sexuality garner the most student interest and discussion.</p> <p>Students want and deserve to attain a complete picture of the living world, not an oversimplification.</p>	<p>Consider sharing student questions or feedback you have collected which indicates that students have a curiosity and a desire to learn about gender, sex, and sexuality in biology.</p> <p>Consider sharing your lesson materials with administrators, families, and other stakeholders. Many adults will benefit from an update to their biology content knowledge.</p>
<p>“This isn’t age-appropriate.”</p>	<p>Many young people are developing and coming to terms with their gender identity and sexuality during high school and even before. By accessing the science behind the social aspects students bring to the classroom, we reinforce how necessary it is to understand and recognize all members of society.</p> <p>In our experience, students often say they wish they had learned <i>earlier</i> that living things are complex and diverse in their gender, sex, and sexuality.</p>	<p>Mayo Clinic Guide - Children and gender identity</p> <p>Consider working with your school’s Health educators to align the language and concepts taught in health and biology.</p>

<p>“We don’t have enough knowledge or resources to teach about gender, sex, and sexuality.”</p>	<p>Our duty to our students requires that we work to gain the necessary knowledge.</p> <p>We can join a growing network of biology teachers who are curating and sharing resources for teaching about gender, sex, and sexuality.</p> <p>We can acknowledge with our students that sometimes we use a textbook or pre-existing lesson materials that are outdated or flawed. We can teach students to critically analyze science texts just as they would analyze literature.</p>	<p>GenderInclusiveBiology.com (K-12 content)</p> <p>Project Biodiversify (College level content that may apply to AP and IB biology courses)</p> <p>Educator Resource-Sharing Facebook Groups:</p> <ul style="list-style-type: none"> • STEM Equity • Science Educators for Equity, Diversity, and Social Justice (SEEDS) • Teaching Social Justice Resource Exchange
<p>“Our community isn’t ready for this.”</p> <p>(or)</p> <p>“We are in a state with ‘No Promo Homo’ laws which restrict discussion of LGBTQ identity.”</p>	<p>Educators must use professional judgment and inform themselves about local laws that concern their teaching.</p> <p>Even small changes in language (see Figure 1) can better support all students, develop empathy towards diverse identities and perspectives, and significantly decrease the rate of suicide among LGBT students.</p>	<p>GLSEN Report on “No Promo Homo” Laws</p> <p>Teaching Tolerance offers a free, award-winning educators’ journal, lesson plans, and teaching kits.</p> <p>Books to Help Adults Understand Trans and Non-Binary Children from Welcoming Schools which also offers free lesson plans and book lists</p> <p>A Collection of Resources for Teaching Social Justice by Cult of Pedagogy Blogger Jennifer Gonzalez</p> <p>The NSTA Position Statement on Gender Equity in Science Education includes specific guidance on teaching about reproduction and evolution beyond solely male-female heterosexuality.</p> <p>The NABT Position Statement on Equity in Science Education discusses the obligation of biology teachers to provide education that “reflects the full spectrum of human dimensions.”</p>

For more resources, visit GenderInclusiveBiology.com