

# THE SEX AND GENDER DISCUSSION

Does it belong in the curriculum of higher educational biology courses?



Biology has historically promoted a **deterministic view**, often suggesting that genes alone dictate identity and behavior. This view implies that 'natural' is strictly genetic and fixed which can hinder queer student participation in biology<sup>1</sup>.

In Norway, queer individuals report higher rates of *discrimination and harassment*. The Norwegian action plan (2023-2026) aims to improve queer people's quality of life, safeguard their rights and contribute to greater acceptance of gender and sexual diversity<sup>2</sup>.

**Expanding biology education** to include discussions on gender and sexual diversity challenges some *historical assumptions* and may make biology more inclusive.

## What do the students report?

570 biology students from nine institutions across Norway have responded to a voluntary survey (bioCEED, 2023) in which they voiced their opinion about the topic's **current coverage** in their courses and to what degree they think it **should be covered**.



Centre for Excellence in Biology Education  
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270 students also gave written responses in which 1/3 of them provided constructive examples of how the topic could be implemented in higher education biology (e.g., specific courses, how professors should introduce it, or how it should be integrated into the curriculum).

## Biology students' perceptions of the coverage of gender diversity in higher education biology curricula

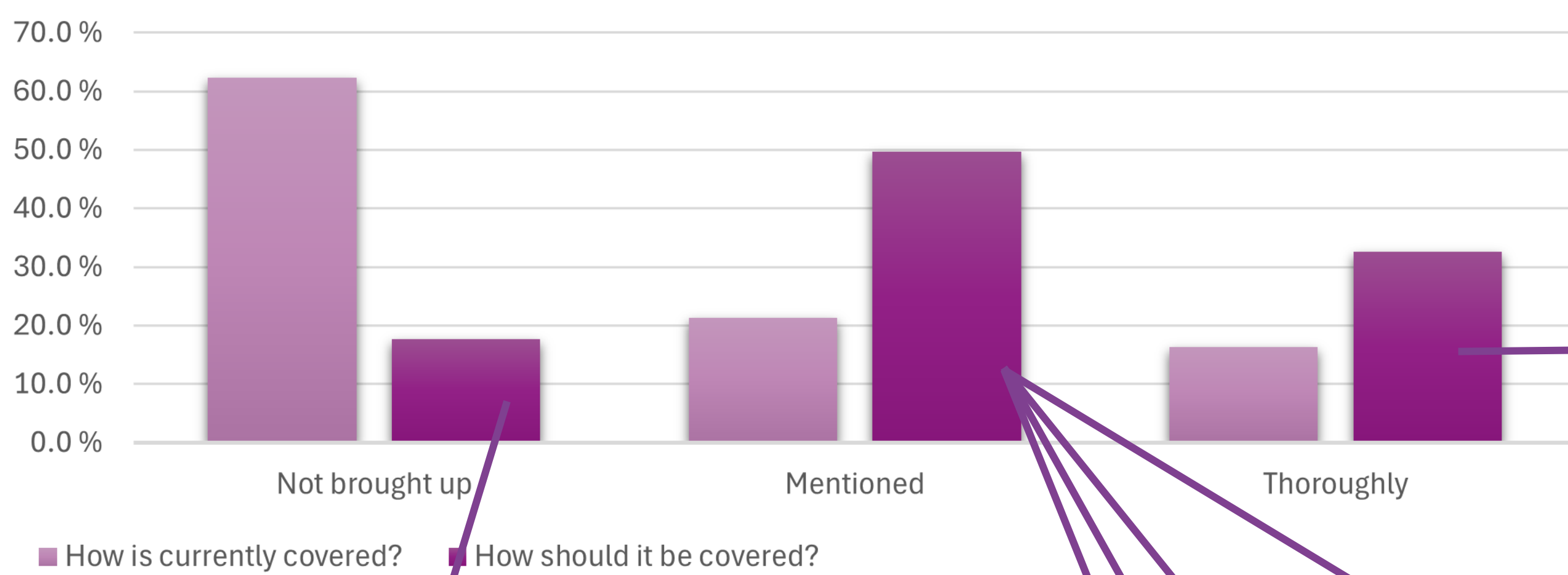


Figure 1: Student answers to two survey questions

## Student Suggestions

Norwegian answers have been translated to English

"Lack of philosophical depth in biology courses is the most disheartening thing about studying biology at university [...] Having some reading on **who decided definitions** of things like gender, and why we do so would be excellent."

"I am responding to this as a trans person. [...] I am tired of debating whether I am allowed to exist and **whether I am unnatural** in educational settings. [...] Just say that humans are generally born with XY or XX, **among other chromosome combinations**, and that some people choose to take hormones and alter their bodies later in life. [...] If this information could be conveyed without alienating trans people and without making gender and gender identity seem dangerous, that would be good."

"The biological sex should be acknowledged. My experience with teachers acknowledging gender or sexuality is mostly bad, they usually use stereotypes, outdated flat jokes. They come off as **offensive and, in some cases, even sounds like eugenics.**"

"It is incredibly important to recognize and accept that there are different **biological and social genders**, but I don't think it's necessary to go into detail about that in teaching."

"I took a course in **behavioral ecology**, where human behavior was one of the topics, and the subject of gender was discussed. I found this **appropriate and interesting**. Discussions around 'sex' and 'gender' are something I have rarely encountered in my studies, and I think it's natural that I have encountered it to a limited extent."

"It is important to **make that distinction** but not necessarily go in depth."



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1: Blackburn, M. V., & McCready, L. T. (2009). Voices of queer youth in urban schools: Possibilities and limitations. *Theory into practice*, 48(3), 222-230.  
2: Ministry of Culture and Equality. (2023). *The Norwegian Government's action plan on gender and sexual diversity (2023–2026)*. Government.no.