



**Science
Societies**

Slow internet plagues education in rural America

June 12, 2021



Source: Adobe Stock/Song_about_summer.

In the midst of the 2020 COVID-19 pandemic, universities were forced to alter how classes were taught. Most classes quickly transitioned to online instruction.

New research in *Natural Sciences Education* focuses on the impact of internet access on student learning experiences and the ability of faculty to maintain personal teaching styles in the context of online instruction. Specifically, this article discusses the role of internet access in higher education for rural students and instructors. Synchronous classes (where participants are “live” online together) typically require high-speed internet capabilities. Asynchronous classes, on the other hand, can function with slower connections as students access course materials at their discretion. In 2019, 57% of U.S. farms had broadband access while the remaining 43% of farms used slower internet connectivity, suggesting that rural students may face barriers to fully engaging in their online courses.

Rural Americans lag behind their urban and suburban counterparts in broadband access, and the authors suggest that these inequities should be taken into consideration as higher education transitions from the pandemic back to a pre-COVID academic environment. Recognition of differences in internet access and capabilities will help ensure the inclusion of rural students who live in the digital divide.

Dig Deeper

Boerngen, M.A., & Rickard, J.W. (2021). To zoom or not to zoom: The impact of rural broadband on online learning. *Natural Sciences Education*, 50, e20044.

<https://doi.org/10.1002/nse2.20044>

[More science articles](#)

[Back to issue](#)

[Back to home](#)

Text © . The authors. CC BY-NC-ND 4.0. Except where otherwise noted, images are subject to copyright. Any reuse without express permission from the copyright owner is prohibited.