

A photograph of a large, multi-story brick building with a central tower and a pedimented roof, illuminated at dusk. The building is framed by a dark, ornate wrought-iron gate in the foreground. The sky is a mix of blue and orange from the setting sun. The Rutgers logo is in the top right corner.

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School of Communication
and Information

Digital Inequality & Remote Learning Experiences Among RU Undergraduates

Amy Jordan & Vikki Katz | July 13 2020

- Online survey of undergraduates learning remotely at universities across the U.S. and abroad (N ≈ 3,600)
 - Rutgers-New Brunswick subsample: **N = 1,281**
- Convenience sample, distributed among faculty networks at Rutgers for broad representation
- Duration: April 21 to May 15, 2020
 - Caveat: Survey was taken when semester had not been completed for most and stay-at-home orders were in place

About the Sample

- 98% were full-time students
- Half were SC&I majors (our home school)
- 44% had never taken an online class before
- 94% had not completed their semester at the time of the survey

RU Sample Key Demographics

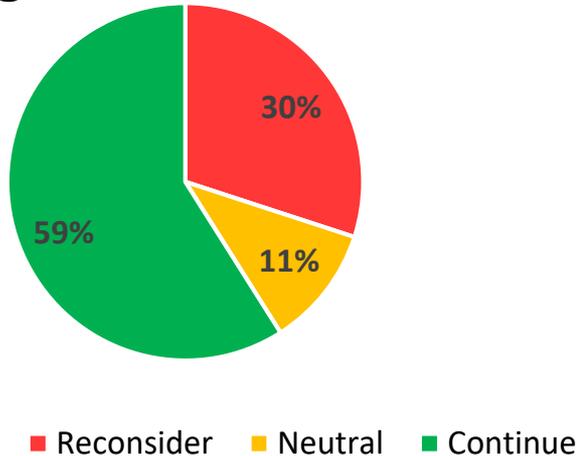
Age	86% between 18 & 21 (modal age 19)
Female	57%
Race/ethnicity	White (47%), Hispanic (15%), Black (9%), Indian (9%), Chinese (6%)
Living arrangement prior to campus shutdown	Dorms/university housing (50%), off campus (27%), at home/with family (22%)
Year in school	Freshman (30%), Sophomores (32%), Juniors (26%), Seniors (12%)
Financial circumstances	Loans to pay for school (57%) Needs-based scholarships (23%) Financially insecure families (28%)

- 1. Concerns about Remote Continuation**
- 2. Digital Equity Challenges/Learning Challenges**
- 3. Perceived Learning Opportunities**
- 4. Recommendations for a remote Fall 2020**

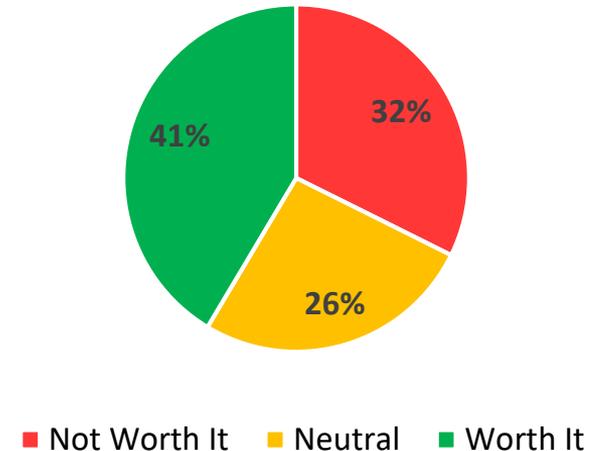
Student Perspectives on Remote Fall in April/May

If your university had to remain in remote instruction for the fall...

... would it make you **reconsider** remaining in college?



... do you feel it would be **worth** remaining in college/continuing to take classes?



Digital Equity Challenges

Assistance

Trouble figuring out new programs **35%**

Broadband

Internet connection too slow, used by too many people **51%**

Connectivity

Developing

Slow or in poor working condition **26%**

Digital Equity Challenges to Keep in Mind: Quotes from Rutgers Students

[I've] been kicked out due to **connection issues** and not ...able to join [again], therefore losing content and credit for attending class

My computer is broken and I have not been able to access my classwork as often as I need to maintain my grades. I am worried I won't graduate

My professor includes certain questions that require **file uploads**....[but] I couldn't figure out how to do it from my laptop, so **I had to switch to my phone to take the exam**. The screen was much smaller and it was harder to see the problems, and whenever I'd switch to a different question, the previous problems would reload and delete my picture. I wasted about 20 minutes of my exam trying to figure out how to successfully upload all of my pictures.

Perceived Learning Challenges

Need for Connection & Clear Expectations

- “I am unable to communicate with my professors (52%) and TAs (38%) as much as I would like”
- “I have trouble keeping track of deadlines and due dates now that we do not meet in person” (67%)
- “I have trouble understanding what is being expected of me in this new learning environment” (60%)

Overwhelmed by Work & Trouble Concentrating

- “I am dealing with a higher workload than I expected” (61%)
- “I have trouble concentrating at home because of interruptions from children or other family members” (70%)

Perceived Learning Opportunities

Less Anxiety

- Able to work at my own pace (56%)
- Less worried about exposure to COVID than when attending class on campus (61%)

My professors generally post their lectures online rather than over video calls, so I can watch them at my own pace.

Time to Prioritize

- No extra-curricular activities; more time to focus on schoolwork (39%)
- No commute, so more time and money (48%)
- Opportunity to spend time with loved ones (71%)

I noticed I always feel better, happier, and more motivated when I have online classes in real time with Zoom.

ABCDs

- **Assist faculty to better assist students**
 - Clear, consistent directives for faculty to ensure improved student experience
e.g., Library access, textbook purchases, workload requirements
 - **Train the instructors.** Incentivize faculty, PTLs, and TAs to complete relevant modules over the summer to ensure high-quality remote teaching with a stipend AND a certificate of completion.
- **Broadband Connectivity:** Ensure students have consistent affordable or free WiFi by providing hotspots or leveraging relationships with NJ ISPs
- **Devices:** Assume that our most vulnerable students will struggle with their devices. Provide RU laptops and tech support free of charge.

Recommendations from Students

Streamline communication with faculty

- SMS-based interaction possibilities?
- Avoid inbox flooding—all course information/deadlines in a centralized location

Standardize platforms and programs to reduce learning curve for students

- Discontinue Sakai so that all courses are on Canvas
- Ensure that all Canvas modalities are visible on phone and tablet, not only laptop
- **Ensure adequate training and ongoing assistance on all learning platforms—especially for freshmen and transfers**
- Many video conferencing services seem unreliable, especially with larger class sizes

Online testing issues

- Time limits, surveillance, upload issues, are performance barriers across test platforms. Students think different test questions/strategies would resolve these problems.

Keeping students motivated, engaged, and part of a learning community

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Thank you for your time

Vikki Katz | vkatz@rutgers.edu

Amy Jordan | a.jordan@rutgers.edu