

Digital Inequality & Remote Learning Experiences Among RU Undergraduates

Amy Jordan & Vikki Katz | August 21 2020



# Methodology

- Online survey of undergraduates learning remotely at universities across the U.S. and abroad ( $N \approx 3,600$ )
  - 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%)  Freshman (30%), Sophomores (32%), Juniors (26%), Seniors (12%)	
Year in school		
Financial circumstances	Loans to pay for school (57%) Needs-based scholarships (23%) Financially insecure families (28%)	



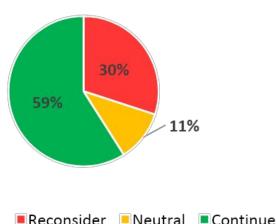
# **Presentation Overview**

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

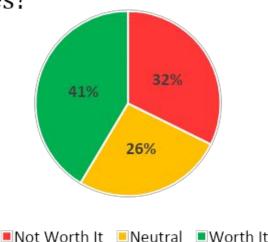
### Student Perspectives on Remote Fall in April/May

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

would it make you reconsider remaining in college?



② do you feel it would be worth remaining in college/continuing to take classes?





# Digital Equity Challenges

Assistance	Trouble figuring out new programs	35%
<b>B</b> roadband	Internet connection too slow, used by too many	51%
Connectivity	people	
Devices	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.



## Recommendations

#### **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 completion of relevant modules 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.

#### https://medium.com/left-to-their-own-devices

# Left To Their Own Devices How college students manage remote learning during the COVID19 pandemic & how faculty can improve it

#### **How To Make Remote Learning Better? Listen to Students**

- 1. Presume your students are under-connected
- 2. Less is more: Helping students manage information overload
- **3.** How to create student community
- 4. Encourage students to develop new learning rituals & routines
- 5. Develop evaluations that feel fair



## Recommendations from Students

#### Streamline communication with faculty

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

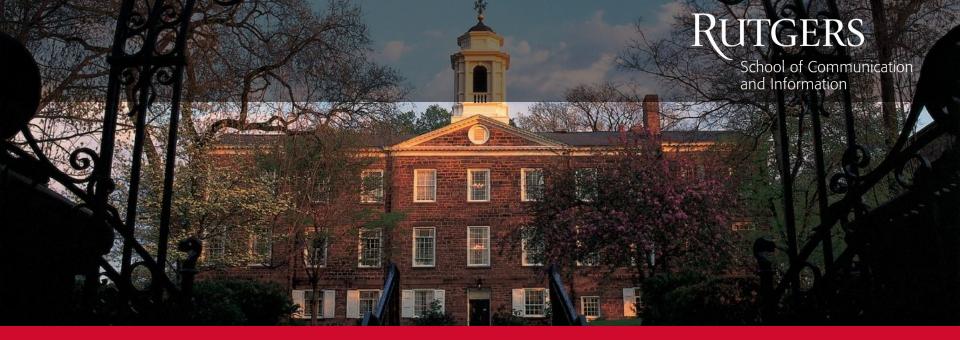
#### Standardize platforms and programs to reduce learning curve for students

- 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



# Thank you for your time

Vikki Katz | vkatz@rutgers.edu

Amy Jordan | a.jordan@rutgers.edu