
**Rutgers University Senate
Information Technology Committee (ITC)
Report and Recommendations on Charge S-2017
“Evaluation of University Continuity of Operations”**

December 1, 2020

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The Charge: S-2017:

Title:

Evaluation of University Continuity of Operations

Description:

Evaluate the IT (Information Technology) implications of remote instruction, research and telecommuting necessitated by the COVID-19 pandemic. Examine issues including the range of remote instruction offered to students and the transition to Canvas and make any recommendations.

Part I. Background and Rationale of Charge:

In March 2020, the University moved to primary remote instruction due to the COVID-19 pandemic. As a result, the majority of teaching, learning, and University administration shifted to online and remote applications in support of business continuity.

The impact of this swift and drastic change in pedagogy for the University remains to be fully understood. This Committee was charged with exploring the IT implications of this shift, and to make recommendations for potential improvements.

The ITC received this charge in mid-September 2020, with a due date of November 23, 2020. The Committee developed this report in a brief 8-week period, as it was a time-sensitive charge and imperative to submit the report prior to the Spring semester. With that, we acknowledge there is certainly more sources of information and feedback yet to be evaluated.

Part II. INVESTIGATION

Availability and Access to Critical IT Information:

Central Site:

The University developed a central hub for information regarding COVID-19 via a web page that is dedicated to providing critical information and resources.

<https://coronavirus.rutgers.edu>

Faculty:

There is Faculty specific information. See: <https://coronavirus.rutgers.edu/resources-for-faculty/>
The website covers University-wide and campus specific support information.

Students:

There is Student specific information. See: <https://it.rutgers.edu/remote-student-resources/>
The website covers a broad spectrum of areas for IT student support, from Internet assistance and hardware (pc/laptop) support, to teaching and learning applications support. Feedback from students indicates some confusion as how to find information quickly and get additional relevant information with regard to their specific situation.

Employees:

There is Employee specific information: See: <https://coronavirus.rutgers.edu/employees/>
The website includes a mix of administrative information and resources.

Software Applications, Resources and Remote Learning:

Service	Link
Video conferencing	https://it.rutgers.edu/remote-student-resources/#video
Learning management	https://it.rutgers.edu/remote-student-resources/#learning
Virtual Labs	https://it.rutgers.edu/virtual-computer-labs/
Software	https://it.rutgers.edu/software-portal/
IT Hardware Recommendations	https://it.rutgers.edu/computer-recommendations-for-rutgers-students/computer-recommendations-by-rutgers-school/
NJ Internet Provider Assistance	https://www.fcc.gov/keep-americans-connected-providers-your-state
IT Coronavirus Services	https://coronavirus.rutgers.edu/health-and-safety/
Dean of Students (for assistance)	http://deanofstudents.rutgers.edu/
Libraries	https://www.libraries.rutgers.edu/

Rutgers Internet Provider Assistance:

The university has two arrangements for Students only with internet providers:

1. Altice: Provides free access to RU students in their Optimum WiFi coverage area. \$15/month discounted wired internet option not yet used but available. The university would have to pay that fee and it's contingent on the student being in the Optimum coverage area.
2. Comcast: RU Students in the Comcast coverage area can use their access points for free until the end of the year. Comcast has a similar discounted plan, but it requires the student to be enrolled in certain government programs.

The Committee was only able to find internet provider assistance for Students. It is unknown whether there is support available to Faculty.

Students who would like to take advantage of the WiFi plan should put in a request with their Dean of Students. <http://deanofstudents.rutgers.edu/>

Rutgers-Newark:

Rutgers-Newark created and launched a Technology LaunchPad Program to increase student support for the Fall 2020 remote instruction semester. Based on the MyRUN portal model, this site provides a one-stop IT support site for the RU-N students with information on virtual labs, on-campus printing locations with touchless printing, and the hours of the Dana Technology Resource Center.

See <https://tlp.newark.rutgers.edu> and <https://studentaffairs.newark.rutgers.edu>.

Rutgers- Camden:

Rutgers- Camden has a website to support the local Rutgers-Camden community.

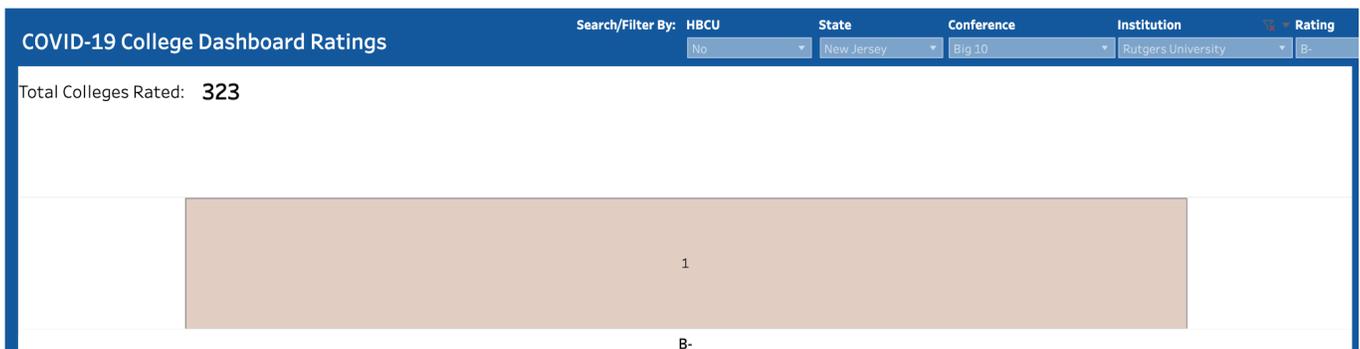
See: <https://www.camden.rutgers.edu/about/responses-covid-19-rutgers-university-camden>

They are also providing dedicated Virtual Lab Data services and support to their Vice Chancellor of Student Affairs for the laptop loaners for students.

COVID Dashboard Rating Project:

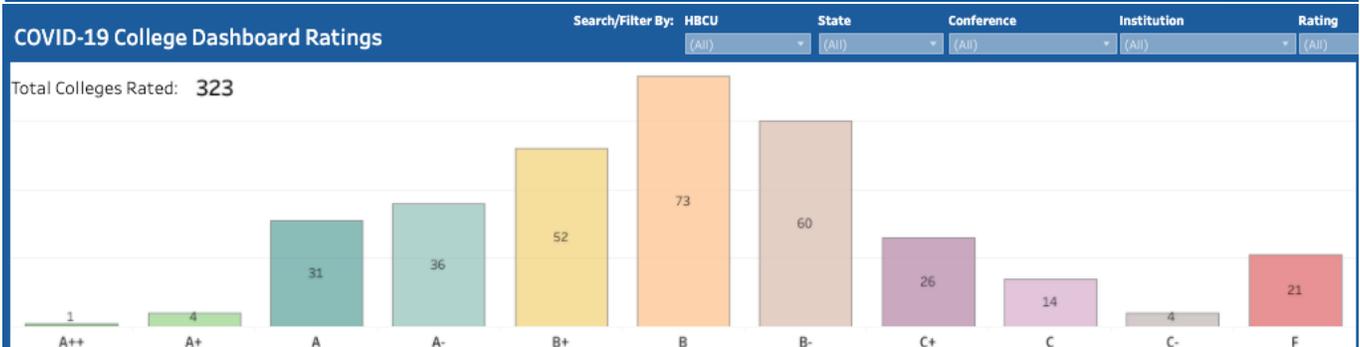
Two professors at Yale University College of Medicine started a project this past summer called “We Rate COVID Dashboards” to assess how well higher education institutions are communicating specifically about the spread of COVID. See project website: <https://www.ratecoviddashboard.com/ratings>

Rutgers’ rating as of 09/20/2020 is a B-.



Click on Institution's Data To Navigate to Their Dashboard

Institution	Rating	Rating Date	Easy to Read?	Updated Daily?	+/- Total Data Presented?	Students/ Staff Results?	City/ County Data?	Frequency of Testing?	Test Result Time?	Isolation/ Quarantine Data?	Campus Summary?	Total Score (out of 13)	
Rutgers University	B-	09/20/2020	3	0	2	1	0	0	0	0	0	6	Dashboard Preview



Note: Of 323 school rated, the majority (73 schools) fell within the B rating, followed next by the B- rating (60 schools)

See article from InsideHigherEd: https://www.insidehighered.com/news/2020/12/01/yale-professors-evaluate-college-covid-dashboards?utm_source=Inside+Higher+Ed&utm_campaign=df53ca7519-DNU_2020_COPY_02&utm_medium=email&utm_term=0_1fcbc04421-df53ca7519-233777677&mc_cid=df53ca7519&mc_eid=7b88b950d7

Part III. Feedback:

In addition to our Committee feedback, we sought additional feedback from three (3) additional constituency groups, both inside and outside of the Senate:

General Instruction

The Co-Chair of ITC reached out to the Chair of the Instruction Curricula and Advising Committee (ICAC.) ICAC provided a complete analysis of instruction operations under the changes made to the University Operating processes due to the COVID-19 pandemic. They reviewed particular successes and challenges, and also expressed concerns with privacy functions related to online exams and the ProctorTrack platform.

In October, the ProctorTrack software vendor had a security incident, and the software was "shutdown." The University has "temporarily" replaced this function with different lockdown software, Respondus. Michelle Norin spoke to the Senate about this during the October Senate meeting, where Faculty expressed concerns that the Respondus software does not provide all the functionality of ProctorTrack. (Both are forms of browser lockdown tools, but Proctortrack uses AI (artificial intelligence) to ensure exam integrity.

See: <https://it.rutgers.edu/2020/10/19/update-on-proctortrack-and-remote-assessments/>

See: <https://canvas.rutgers.edu/external-apps/respondus-4-0/>

Most notable to the university for the upcoming Spring 2021 term is the variety of pedagogical issues presented by the remote delivery of course content. This is of particular concern to the university for retention, most notably for first-year students, who will only have the remote college experience this semester.

For other matters related to General Instruction, the ITC recommends the review of ICAC's full report and their recommendations. See Charge S-2016 (pending.)

Canvas

The Co-Chair and a few members of the ITC met with Charlie Collick, the Associate Director of IT Accessibility and Academic Technology within the Office of Information Technology (OIT.) Charlie shared that a large part of his role, working with his Steering Committee (includes 17 Faculty members) is to pull all the Canvas support groups together and leverage resources across the groups to best support the University Community. Charlie is proposing a central enterprise group that is attached to the technology with a matrix *style organization that would improve coordination between central and local support. (*matrix organizational structure is a combination of two or more types of organizational structures/groups -uniting them for resources and balance.)

The transition to Canvas is targeted for completion by the end of Spring 2022 (4-5 year migration.) He and his team are working directly with each Unit/School to understand their unique requirements and to ensure all issues are addressed prior to their migration. In support of this effort, he met with Deans and Chairs to solicit feedback to have a successful transition and expressed it was imperative to listen to the stakeholders.

When the pandemic hit, his team suspended all migration activities to allow Faculty to adjust to the drastic shift to remote teaching, and to reduce adding additional strain to IT support. They picked up transition in May 2020, and since then, have migrated about 15,000 courses. The overall focus of the effort was to improve the learning experience for faculty and students. Through the process, they have developed automation tools for PowerPoint slides, assignments and testing which has improved the transition process.

There were support challenges due to the transition to Canvas, further complicated with the new remote instruction, resulting in the Canvas support team, TLT, (Teaching and Learning with Technology, resides in DOCS - Division of Continuing Education) being inundated with 600-900 calls a day. Wait times were extremely long. The calling system was programmed to redirect a call to the Canvas Vendor/Infrastructure for support if the call could not be answered in 2-4 rings by TLT. That practice has since been discontinued during business hours, and now calls are only redirected after hours.

For the Spring 2021 semester, OIT will be handling student user calls to cut down on the volume, while TLT will continue to handle the bulk of instructors' calls (although ATS in Newark will continue to support all their users locally). For Fall 2021, OIT will take over Canvas support for both faculty and students, except for where local support takes precedent (Academic Technology Services, Newark and Instructional Design and Technology, Camden.)

They are looking to further improve support by offering two helpdesks, separating student and faculty support. The plan is that number will remain the same, but the caller will be prompted to identify as being a student or faculty member. Charlie indicated his team would welcome Faculty volunteers who would be willing to assist with peer-to-peer training, since faculty understand the discipline and can apply that critical perspective.

Research

The Committee emailed Vice President of the Office of Advanced Research Computing, Barr Von Oehsen and received the following feedback:

- Many researchers pivoted from experimental to modelling and simulation in order to continue their research, which in turn led to hours of virtual consulting with the OARC support team to help with the transition
- Classes that moved from in-person to virtual were also affected by the COVID-19 crisis when suddenly applications that were available through computer labs were no longer available. Faculty using certain software applications within the classroom had to refactor their teaching approach to compensate for the lack of access to these applications.
- COVID-19 increased the demand beyond the expected growth on campus and at national labs, adding unsustainable pressure to already overburdened programs.

Student Affairs

The Committee received feedback from the Chair of the Student Affairs Committee:

- RUSA has created a fund to support students in need (all financial needs including technological)
- Professors with extensive experience teaching online know how to support students and/or know who to go to at the University for technical support but those who are new to it don't have that knowledge and don't know how best to support students
- Not clear that students abroad such as those in China who face firewalls are supported or that the University has taken steps for them to access Rutgers classes
- Overall concern about students who don't have access necessary to succeed (i.e., those who find themselves in parking lots or elsewhere in search of Internet access or WiFi)

ITC

Our Committee, which consists of Faculty, Staff, Students and Alumni, along with some additional feedback from Senators shared our perspectives on the IT challenges and successes. We agreed that there were and continue to be challenges in communications, training, and access to assistance. However, we found the shift to remote learning also prompted a great amount of success stories and new practices that support our President's vision of a "Beloved Community."

Challenges:

- Information resources and solutions differ across the campuses and schools
- Communications challenging
- Remote access is problematic for some faculty, staff and students
- Transition to Canvas was interrupted and modified to better align with supporting remote use
- Application changes are delivered with little to no notice to the University community (i.e., CampusPass App, Visitor log, Zoom updates)
- Some essential classroom software is only available in computer labs
- Students do not have a sense of feeling "connected" to the university or its Faculty
- Lack of continuity for students:
 - Student expressed they felt there are more assignments
 - Lack of interaction with instructors
- Need to be more sensitive and aware of faculty and student needs
- Evaluation of students' performance – how to judge in open-book environments, how to prove that students are working on their own assignments/exams/reports.

Successes:

- Telecommuting:
 - Reduces stress
 - Reduced commuting, promotes a green campus
 - More available parking for those who need to be on campus
 - Telemedicine/Telehealth:
 - Increased and improved student access to physical and mental health services
- *(See *Appendix 1* for 9/2020, 10/2020 data)

- Remote learning:
 - Allows for larger classes with less congestion – classes can expand beyond the physical limitation of a classroom
 - Students like the convenience and have better access to professors
 - One-on-one communication student/faculty - improved
 - More access to faculty via web conference
 - Easier to schedule than in person office hours
- Proactive outreach to students to ensure they don't get lost (while remote)
- More participation in events when virtual
 - Virtual RUSA town halls have been better attended
 - Virtual Alumni events have been better attended
 - More faculty attended the virtual Engineering Faculty Meetings; The Dean is considering to have some remote faculty meetings even after the pandemic is over.
- Provided faculty the opportunity to reimagine how they teach and made it possible to present the materials in a more effective way (For example - Recording videos: compressing information into shorter timeframes and more streamlined, using videos that are publicly available)
- Helps instructors and students.
- Increased virtual programming targeted to alumni to hear from University faculty and staff

PART IV. RECOMMENDATIONS:

Technology continues to drive the day-to-day operations of the University. The University successfully transitioned its operations from in-person to remote for faculty, staff and students in response to the pandemic. Although, it is unclear how faculty, staff and students “feel” about the shift. We learned there have been some departmental surveys, but we are unaware of any large, broadscale effort to assess impact of the shift on the University community. It is important the University understand and evaluate the impact on teaching and learning, as well as the potential emotional and physical toll this pandemic may have caused for some of our University family.

Our findings revealed that while there have been IT challenges in adjusting to this shift, there have been great accomplishments, opportunities and advancements that should be recognized, evaluated, and incorporated into our institutional way-of-life. As we continue to adjust and adapt to the “New Normal” at Rutgers, we hope that each of the challenges and successes are thoughtfully considered as we return to campus.

More than ever, with the advent of virtual teaching and learning, Rutgers will need to differentiate itself from the rest in its pursuit of excellence. IT can certainly be a useful tool to help Rutgers achieve its goals. It will need dedication, prioritization and clear leadership to achieve President Holloway’s goal of creating a “Beloved Community”, while at the same time providing robust, remote programming combined with a valuable onsite experience.

RESOLUTION

Be it Resolved that the Rutgers University Senate recommends that:

1. The University Administration disseminate information to Faculty, Staff and Students on a consistent and coordinated basis regarding IT implications to teaching and learning as a result of the COVID-19 pandemic, i.e., Rutgers Mobile application, Canvas Dashboard, MyRutgers.
2. The University Administration continue to provide software and resources that facilitate remote advising, events, learning, teaching, telemedicine and working.
3. Local IT and OIT coordinate efforts to provide expanded support for Canvas.
4. Telecommuting become a standard practice and continue for those who are eligible and able to provide the same level of service while working remotely.
5. The University Administration, with consultation from Faculty, Staff and Students, review and update the University Telecommuting Policy - Section: 60.4.11, issued 2/2/2010, <https://policies.rutgers.edu/sites/default/files/60.4.11-current.pdf>
6. Consultation with the University Senate through the ITC should be an important component of the decision-making process when significant IT decisions are contemplated.

Information Technology Committee (ITC): 2020-2021

Adrienne Esposito, Co-Chair, New Brunswick Staff

Brian Everett, Co-Chair, Camden Staff

Robert Boikess, Member, School of Arts & Sciences-NB, Faculty

Masanori Hara, Member, School of Engineering, Faculty

Joseph Holdom, Member, School of Arts & Sciences-NB, Student

Maria Ibrahim, Member, School of Graduate Studies, Student

Cecelia Kane, Member, Camden Staff

Nikolaos Linardopoulos, Member, New Brunswick At-Large, Faculty

Kenneth Nelson, Member, Rutgers Business School Undergraduate Newark

Troy Shinbrot, Member, School of Engineering, Faculty

Martin Siederer, Member, Alumni Association

David Winters, Member, Part-Time Lecturer-New Brunswick, Faculty

Appendix 1 - Camden

Student Wellness Center Utilization

September, October 2020

	September In Person Visits	October In Person Visits
Medical	122	138
Psychiatry	0	0
Mental Health	77	18

	September Virtual Visits	October Virtual Visits
Medical	191	329
Psychiatry	40	33
Mental Health	221	420

Appendix 2- Newark
September, October 2020

Counseling Center

	September Visits	October Visits
In-Person	0	0
Virtual Individual	331	350
Virtual Group	61	41

Student Health Services

	September Visits	October Visits
In-Person	60	110
Virtual Individual	159	302

Appendix 3 - New Brunswick

Counseling, Alcohol and Other Drug Assistance Program & Psychiatric Services (CAPS)

September, October 2020

	September 2019	September 2020
In Person	2237	N/A
Virtual	0	1093

	October 2019	October 2020
In Person	2961	N/A
Virtual	0	1162

*November 2020 (as of November 13) – 601 Virtual visits