Charge: S-1503: Testing Facilities at Rutgers: Examine the state of testing facilities at Rutgers. Are there issues relating to facilities for both traditional and computer-assisted testing? Is there a need fora separate testing facility/facilities? Can existing space be better utilized? What is the availability and process for instructors in online courses to reserve physical spaces for their exams?

Assessment is central to the academic mission of the University. The Senate Instruction, Curricula and Advising Committee has been examining the state of testing facilities on campus and has identified several issues that should be addressed:

• The need for more adequate facilities for traditional testing
• The need for facilities that can provide for scanning/grading scantron-type exams.
• The need for facilities for computer-assisted testing
• The need for instructors in online courses to be able to reserve physical spaces for their exams
• The need for better utilization of existing space, not just for assessment but for basic teaching and learning

Adequacy of available sites for course assessment

Faculty on all three campuses have voiced concerns about the adequacy of available sites for testing in their courses. This is a key issue that does not appear to be getting adequate attention. Assessment is central to our mission; a lack of facilities that allow us to do assessment properly undermines the academic mission of the university.

Common hour/large class exams are especially problematic. In some very large classes—for example General Chemistry in New Brunswick which has 1500 students--exams are on Sunday nights and split over eight locations. It’s not uncommon for some courses to have midterm exams that end at 11 p.m. This presents a potential safety issue for students who must then make their way to living quarters afterwards

However giving an exam—or even just an hourly--to 30 students in a room that only seats 30 (or 25!) is itself an issue. The testing environment should be conducive to testing. Even if everyone “fits” that doesn’t make the space adequate for testing—or even for teaching. Under such conditions it is difficult to ensure the privacy of each test-taker and to ensure academic integrity. Some instructors have opted not to give exams because it’s just too awkward.

In New Brunswick/Piscataway, the College Avenue Gym and the Livingston Gym are being used for common hour and other exams. While they are adequate in size, they are not particularly
conducive to test-taking—they are extremely noisy and the flow of traffic during the test is disruptive.

There are also issues with facilities needed for professional or other standard tests. For example, the School of Nursing in Camden has to administer computer-based national tests to over 100 students. There is no place on campus where this can be done in one sitting.

**Limited facilities for scanning/grading scantron-type of exams.**

The ability to have students complete multiple choice tests manually (using the ubiquitous #2 pencil) in a traditional classroom and then use an optical scanner to grade the tests has been available for quite some time. Instructors in courses where multiple choice tests can serve as an appropriate assessment tool, especially those teaching large introductory courses, may find this an attractive option. However, for an institution of this size, Rutgers seems to have limited access to this standard and rather simple technology.

In New Brunswick, the need for facilities with available optical scanners seems to be particularly acute—for a number of years the Center for Teaching Advancement and Assessment Research was deluged every semester with requests to use their Datalink 3000 test scanner. As of September 2015 that scanner is no longer available. Camden has one exam scanner (ScanMark iNSIGHT 4ES) that can be reserved in the lab in the Robeson Library. Newark Computing Services currently has a Scantron 888P+, located in the Dana Library, and a Scantron ES2010 optical scanner located in Engelhard Hall 313.

**Limited facilities for computer-assisted testing**

There are many faculty that have serious concerns about online testing, especially in light of the perceived ease of academic integrity violations in the online environment. As the number of online courses increase, more and more testing will be done online. But even in traditional face to face and in hybrid courses, there is interest in computer-assisted testing and assessment. Some textbook publishers offer electronic test banks, or even the ability to load test banks into a Course Management System which can then be used for testing. However facilities for computer-assisted, or even just computer-based, testing are very limited.

Currently, in New Brunswick CTAAR has a small testing center—hardly adequate for a campus of this size. Faculty or academic units who would like students in online courses to be proctored on-site can also make arrangements for the use of the 18-seat facility at the Center for Online and Hybrid Learning and Instructional Technologies (COHLIT). Proctors must be provided by the academic unit, and students are charged a fee payable to the academic unit.

---

1 Rutgers Continuing Studies currently offers electronic as well as on-site exam proctoring services for online students, who pay an extra fee for each assessment. RWJMS students take exams using their own laptops in a large, proctored room utilizing software that locks them out of everything but the exam.
The computer lab in the Robeson Library in Camden has 174 computers. However only the exam scanner seems to be reservable. Nor would you want to routinely deny students access to the biggest lab on campus, especially during crunch times. In Newark, as part of a Newark Computing Services/Dana Library initiative, the largest computer lab on campus was moved from Hill Hall to Dana Library which is now home to some 100 student PCs. Existing open computing laboratory space in Hill 123, 125 and 127 are now being converted into flexible instructional laboratories that can also be used as testing centers.

A free-standing testing center on each campus, designed specifically for computer-assisted testing, might alleviate, although perhaps not solve, the situation on each campus.

A stand-alone testing facility can offer space for any or all of the following:
- Exams for large lecture classes and common hour exams.
- Individual course exams in an appropriate, proctored environment.
- Cost savings to individual departments. (Some departments spend considerable sums per year to print off exams.)
- Exam security for online and hybrid courses/robotic proctoring.
- The implementation of learning assessment tools that provide feedback to students at various points in semester—which could help RU meet accreditation-agency mandated assessment goals.
- The freeing up of classrooms
- Assessment and credentialing (for example, credits for passing CLEP or other standard exams; GREs, SAT, ACT, etc.; placement exams)

A well-equipped and staffed facility could also be rented out. COHLIT currently directs students to off-campus testing/proctoring centers in New Jersey, including centers at Raritan Valley Community College, Mercer County Community College, and the County College of Morris. Fees for students taking their exams at these facilities vary between $35.00 and $50.00 per test.

It’s also possible that it might be more economically feasible to pair up with an existing commercial facility than to develop our own. For example, in the New Brunswick area Pearson has a testing center on Rt. 27 in Somerset as well as one in Princeton. The viability of such an arrangement would have to be investigated.

While the viability of Rutgers pursuing the construction of one or more stand-alone testing facilities is something that the Committee feels merits further consideration, that consideration is beyond the scope of this committee.

**Process for instructors of online courses to reserve physical spaces for their exams**

One of the biggest areas of faculty concern with online courses is the perceived potential for increased cheating. Federal mandates require all online programs which receive financial aid to have identity verification and authentication processes in place. In Spring 2015 Proctortrack software, which uses biometrics to confirm student identity and then uses the test-taker’s
webcam to continuously capture video of the testing environment, was made available university-wide. However many students are unhappy about the intrusive nature of the software as well as the $32 fee that they must pay for each exam. And many instructors are skeptical of its effectiveness in ensuring academic integrity and would strongly prefer to have the option of scheduling in person exams.

Currently only Rutgers Newark makes provision for in-person exams for online courses. Instructors in online courses who wish to give an in-person exam may do so during the Saturday 12:30-3:30 exam slot. SAS in New Brunswick has submitted a proposal <http://senate.rutgers.edu/SASNBP ProposalToChangeAcademicCalendarForOnlineCourseExams.pdf> that the Sunday\(^2\) occurring during the official final exam period be set aside for in-person exams for fully online courses, with exam slots provided at 11 am, 2 pm and 5 pm to accommodate students who take more than one on-line course. In order that times and locations be included in an online course syllabus, these slots would be allocated at the same time that classroom space is allocated for face-to-face classes.

This would seem to be a reasonable proposal. In Fall 2014, there were 9819 students enrolled in online courses offered by New Brunswick; of these 293 were Newark or Camden students. There were 1476 students in online courses offered by Newark; of these 140 were New Brunswick or Camden students. We know that the majority of students in fully online courses are actually on campus students. Obviously not all instructors of fully online courses are giving exams or would opt for face-to-face exams. The option to do so, with a date and time that can be on the syllabus from the beginning, should be available.

**Utilization of Existing Spaces:**

There is a sense that Rutgers can do a better job with its existing space—We don’t use our campuses well on 24/7 basis. There needs to be a more efficient utilization of space based on actual scheduling.

- Instructors need to know before a course is given what the testing facility options are (e.g., the capacity/setup of the assigned room). In New Brunswick, Scheduling provides information on general classroom capacity and accessibility [http://scheduling.rutgers.edu/capacities.shtml]; Newark provides information on general classroom capacity [http://scheduling.newark.rutgers.edu/assets/assets/GeneralPurposeClassrooms-October2015.pdf]. However it’s not enough to know capacity; how each space is set up is important, not just for test-taking, but also for conducting that particular class. While some floor plans (New Brunswick Lecture Halls https://scheduling.rutgers.edu/space-management/lecture-hall-layouts, for example) are currently available, they are not terribly useful for visualizing class configuration or assessment.

\(^2\) Currently only Rutgers Newark has exams on Sundays.
Most facilities are controlled by central scheduling; however there are a lot of “restricted use” spaces. Some people have contracted the rights to certain rooms; some of these are sitting empty. There should be some sort of periodic review to determine if these restricted use spaces should continue to be restricted.

There is a need for designated overflow rooms for exams. Many courses have a final paper instead of an exam. However the classroom is still booked as if it were going to be used for the exam. There should be a way, perhaps through the use of a mid-semester survey, to identify those rooms so they could be made available for finals.

The process for how final exam classrooms are assigned needs to be more transparent.

There seem to be some changes to how rooms and times are allocated that could alleviate some current problems. For example, in our meeting with Christopher Morett, the Director of Scheduling and Space Management, he brought up the possibility of moving away from block scheduling. This would probably entail developing a whole new scheduling system. RCM budgeting might result in some changes as well if departments realize that they are paying for rooms for testing that they are not using. Or need to pay for rooms in order to give a test.

Existing Facilities

Facilities for Students with Disabilities

In New Brunswick, the Office of Disability Services has a dedicated exam testing space, Room A137 in Lucy Stone Hall, with 32 seats. Students in any course in New Brunswick who have been approved for accommodation can make arrangements to take an exam there. Exams are proctored by ODS staff.

The Office of Disability Services in Camden has space in the Rutgers Camden Learning Center where Camden students who have been approved for accommodation can make arrangements to take ODS-proctored exams.

The Office of Disability Services in Newark has space within its offices where Newark students who have been approved for accommodation can make arrangements to take ODS-proctored exams.

Potential Testing Facilities

The Committee spent some time discussing facilities with large rooms that might be used for testing purposes. In New Brunswick/Piscataway these might include:

<table>
<thead>
<tr>
<th>ARC</th>
<th>ENB 120</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beck</td>
<td>Hickman 101</td>
</tr>
<tr>
<td>Business School</td>
<td>Hickman 138</td>
</tr>
<tr>
<td>College Avenue &amp; Livingston gyms</td>
<td>Hill 114</td>
</tr>
<tr>
<td>CORE</td>
<td>Hill 116</td>
</tr>
</tbody>
</table>
Lucy Stone Hall
Medical School towers
PLH
School of Public Health
Scott 123
Scott 135
SEC 111
SEC 117
SEC 118
Tillet
The Theatre in the Livingston dorms
Visitors Center Lower Level
Voorhees 105
Wright

Large lecture spaces available in new construction on College Avenue and those available on the Health Sciences Campus should be identified and added to the above inventory. Certainly when new construction projects are being developed, serious thought needs to be given to not just the size but also the physical layout of classroom spaces to serve a variety of purposes.

In Newark and Camden there are large lecture halls in the Law Schools; perhaps these could be used on Saturdays for testing. The School of Nursing in Camden is using the Gordon Theater for labs. However there are no desks so it is not appropriate for testing purposes.

It would be useful to conduct an inventory of possible spaces that could be used for testing on each campus.

While the focus of our inquiry here has been on facilities and resources for assessment, it’s important to emphasize that instructors need adequate—and appropriate—spaces in which they can teach and students can learn. The classroom experience should not be limited to rows of desks crammed together so as to offer a seat to the largest possible number of students. If we want to maximize learning, we need to look at flexible spaces that can be adapted to a variety of instructional methods in a traditional or flipped classroom.
Resolution:

Whereas: Assessment is central to the academic mission of the University and there are serious concerns about the adequacy of the facilities for both face-to-face and computer-assisted testing at Rutgers;

Be It Resolved That the Rutgers University Senate recommends that:

1. The University Administration should set up a committee to look at the issues relating to testing facilities as well as the existence of appropriate classroom spaces on all the campuses. Such a committee should conduct an inventory of possible existing spaces that could be used for testing on each campus, as well as consider the merits and viability of constructing stand-alone testing facilities.
2. Classroom scheduling websites and databases should be modified to include information on not just classroom size, but on setup (for example: auditorium seating; fixed desks; tables with chairs, etc.).
3. Maps for the large lecture halls should be updated and linked to room descriptions.
4. Scheduling should survey academic units at mid-semester as to their need for their assigned rooms during final exams. Rooms that will not be needed can then be made available to faculty giving exams.
5. Scheduling offices should conduct a periodic review to determine if restricted use spaces should continue to be restricted.
6. Each university unit (Camden, New Brunswick, Newark and RBHS) should allocate special funds for optical testing scanners and appropriate facilities in which that scanning could be done.
7. Individual departments and schools should not be charged for the use of testing facilities. Cost considerations should not be a determining factor in assessment.
8. In New Brunswick, the School of Arts and Sciences should proceed with their plan to allot regular on-site exam slots for online courses when requested. University units where this option is not currently available should consider implementing such an option.

11/23/15

2015-16 Instruction, Curricula and Advising Committee Members:
Natalie Borisovets, Chair Libraries, Faculty
Wanda Blanchett GSE Dean, Administration
Mary Bridgeman Pharmacy, Faculty
Terence Butler SAS-NB, Faculty
Nancy Cantor Newark Chancellor, Administration
Ann Coiro SAS-NB, Faculty
Barbara Cooper SAS-NB, Faculty
Diane Davis SEBS, Faculty
Donna Fennell SEBS, Faculty
Sarah Gold SSW, Student
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>James Hayton</td>
<td>SMLR Dean, Administration</td>
</tr>
<tr>
<td>Paul Israel</td>
<td>SAS-NB, Faculty</td>
</tr>
<tr>
<td>Robert Johnson</td>
<td>NJMS Dean, Administration</td>
</tr>
<tr>
<td>Tia Kolbaba</td>
<td>SAS-NB, Faculty</td>
</tr>
<tr>
<td>Kwangwon Lee</td>
<td>UC-C, Faculty</td>
</tr>
<tr>
<td>Peter March</td>
<td>SAS-NB Dean, Administration</td>
</tr>
<tr>
<td>Jorge Marcone</td>
<td>SAS-NB, Faculty</td>
</tr>
<tr>
<td>Christina McGinnis</td>
<td>SAS-NB, Student</td>
</tr>
<tr>
<td>Mikayla Meyer</td>
<td>SAS-NB, Student</td>
</tr>
<tr>
<td>Lisa Miller</td>
<td>GS-NB, Faculty</td>
</tr>
<tr>
<td>Helen Pirrello</td>
<td>Alumni Association</td>
</tr>
<tr>
<td>Joseph Schiavo</td>
<td>Assoc. Dean, CCAS, Administration</td>
</tr>
<tr>
<td>Robert Scoloveno</td>
<td>Nursing-C, Faculty</td>
</tr>
<tr>
<td>Joel Shapiro</td>
<td>At-Large NB, Faculty</td>
</tr>
<tr>
<td>Michael Shapiro</td>
<td>NJMS, Faculty</td>
</tr>
<tr>
<td>Neil Sheflin</td>
<td>SAS-NB, Faculty</td>
</tr>
<tr>
<td>George Stauffer</td>
<td>Dean, MGSA, Administration</td>
</tr>
<tr>
<td>Monica Sung</td>
<td>SAS-NB, Student</td>
</tr>
<tr>
<td>Barbara Thomson</td>
<td>NB Staff</td>
</tr>
</tbody>
</table>