



RUTGERS
NEW BRUNSWICK

ACADEMIC MASTER PLAN

Discovery Advantage



SYNOPSIS REPORT

September
2023



SCHOLARLY
LEADERSHIP



INNOVATIVE
RESEARCH



STUDENT
SUCCESS



COMMUNITY
ENGAGEMENT

Chapter 1 | Overview: What is Discovery Advantage?

The Rutgers–New Brunswick Academic Master Plan (AMP) identified four pillars of excellence: Scholarly Leadership, Innovative Research, Student Success, and Community Engagement. Discovery Advantage is a broad initiative to reexamine the undergraduate experience at Rutgers University–New Brunswick through the lens of student discovery, learning, and success and to develop a blueprint for implementing the three main priorities of the Student Success Pillar:

- Create a welcoming, equitable, and supportive learning environment for all students.
- Prioritize on-time graduation with minimal debt for all students.
- Expand high-impact learning opportunities, such as internships, research and more, to best prepare students for future success.

Six Discovery Advantage workstreams, whose members include faculty, staff, and students, examined aspects of the student experience at Rutgers–New Brunswick; their work was united by the three priorities of the Student Success Pillar. They focused on (a) Advising and Academic Support, (b) Curriculum, (c) Enrollment and Marketing, (d) Living-Learning Communities, (e) Data Core, and (f) Administrative and Financial Structure. The workstream members also focused on the tremendous variety of choices students face when navigating our institution: How to choose schools as they enroll; how to seek out the experiences that will help them discover new interests and develop new skills; how to find advising and financial information; and how to decide on courses. The vast array of experiences and resources associated with these processes often defines Rutgers–New Brunswick and creates great value recognized by our students and their parents—but can also create challenges as students navigate their academic journey.

Discovery Advantage looks at cross-cutting issues across all of Rutgers–New Brunswick. Although the charges were broad and the six workstreams examined a number of issues, we are aware that there are other areas that impact the undergraduate experience; some of these are currently being examined through AMP initiatives such as *ScarletWell*, a public health and prevention-focused approach to mental health and wellness for students, faculty, and staff. Others, like transportation systems and facilities, are outside the scope of this planning process. This first examination also does not look specifically at the academic experiences provided by our many excellent undergraduate programs, faculty, and departments. With Discovery Advantage, we are seeking solutions to some of the challenges that exist across our campus. These recommendations provide a first opportunity to broadly impact the undergraduate experience and the priorities that should unite **all** Rutgers–New Brunswick departments and programs. The intent is to create foundational experiences and learning goals that define the education for a Rutgers-New Brunswick student.

This report presents our preliminary findings and recommendations, with the goal of generating broader discussion within the campus community. This should be viewed as a working document that will be revised and amended based on the input we receive from the community. Many of these preliminary recommendations are aspirational; they define what the student experience should be, with the understanding that the university's resources are limited, particularly as it recovers from the pandemic. Though ambitious, several recommendations can be implemented with little cost to immediately improve the student experience while others continue to be developed.

Ensuring that our students get the most out of their experience starts with defining the academic learning goals of a Rutgers–New Brunswick education (the subject of Chapter 2 of this report), continues with recruitment and marketing to ensure we enroll a diverse group of students who understand what Rutgers–New Brunswick has to offer and come here ready to start on their path to discovery (Chapter 3), and requires offering experiences and opportunities that create a welcoming environment where students can progress academically and develop the skills they need for future success (Chapters 4 and 5). But—because the breadth of opportunities, majors, and co-curricular activities can be difficult for students to fully know about and navigate—there is a need for improved advising and academic support to help students access these opportunities and complete their education in a timely manner, with limited debt, and prepare for their chosen career (Chapter 6). The recommendations were informed by currently available data on retention and graduation rates, but deeper analyses of student successes and challenges is limited by our current data systems and processes, which will need to be evaluated and updated (Chapter 7). Finally, we recognize that the Rutgers–New Brunswick student experience exists within the larger institutional context, both physical and procedural, and is affected by universitywide issues and processes. Although not entirely within the purview of this initiative, we believe it is important to identify some areas of concern and articulate how these issues affect the undergraduate experience at Rutgers–New Brunswick (Chapter 8).

The preliminary findings and recommendations presented in this report are only the first step in reimagining the Rutgers–New Brunswick student experience. During the coming months, Discovery Advantage working groups will engage the campus community in broad discussions through town halls and focus groups that may inspire the modification of some recommendations and/or the addition of others. Therefore, this report should be viewed as a working document that will be revised and amended based on the input we receive from the community. And even after the final Discovery Advantage report and recommendations are prepared, this initiative will represent just the beginning of our communitywide efforts to improve the undergraduate experience. We will continue to adapt to new data and emerging needs and priorities to support student success.

Chapter 2 | Defining the Student Experience: What is a Rutgers–New Brunswick Education?

To impact student success and help our students navigate the university, we first have to define what we want our students to accomplish during their time at Rutgers–New Brunswick. The Learning Goals subcommittee of the Curriculum workstream focused on identifying shared learning goals to inspire and guide student learning at Rutgers–New Brunswick. Learning goals are intended to be inspirational and achievable, but not necessarily measurable, while learning objectives or learning outcomes are directly measurable actions. The committee started with a review of the Rutgers University learning goals and found these to be appropriate, with some recommended revisions. The committee reviewed how the Rutgers–New Brunswick schools articulate learning goals onto student curricular and co-curricular activities. The Rutgers University learning goals provide a framework to identify areas in common, as well as some learning goals that are currently not as developed across the schools.

Given the range of schools—professional, liberal arts, fine arts—and accreditation concerns in some disciplines, the next step is to work with schools to articulate how learning goals are achieved. A review of Big Ten Academic Alliance peer institutions revealed a range of strategies that could include general education courses, learning objectives tied to majors, co-curricular activities, and student self-assessment of learning. To achieve the goals of the Academic Master Plan, especially with respect to

creating a welcoming, equitable, and supportive learning environment, Rutgers–New Brunswick students need to feel they have access to the entire university and are able to transfer across schools without confusion or extra burden in completing general education requirements.

Recommendation 2.1. With these considerations in mind, we propose the following learning goals for Rutgers–New Brunswick, and recommend that they be adopted by all the New Brunswick chancellor-led schools:

1. ***Intellectual and Communication Skills***

- **Critical Thinking:** Students will develop their ability to engage in logical thinking and complex critical analysis and to conduct interdisciplinary inquiry.
- **Communication:** Students will develop their skills in expressing complex ideas through written and oral communication.
- **Mathematical Reasoning and Analysis:** Students will develop their skills in analyzing and interpreting numerical data and in reasoning and problem-solving through mathematical processes.
- **Scientific Inquiry:** Students will develop their understanding of scientific methods of inquiry, including the use of observation and experimentation to answer questions and generate new knowledge.
- **Information and Computer Literacy:** Students will develop competency in navigating, gathering, analyzing, and interpreting information effectively, responsibly, and ethically in an increasingly data-driven environment.
- **Creative and Empathetic Inquiry:** Students will understand and engage in creative practices as a means of self-expression and relating to others.

2. ***Understanding Human Behavior, Society, and the Natural Environment***

- **Historical Understanding:** Students will develop their understanding of the historical bases of the societies and world in which we live.
- **Global and Diverse Understandings:** Students will understand how individual and group identities, histories, perspectives, and experiences both shape and are shaped by broader societal, political, and economic systems and power differentials. This should include developing an awareness of other cultures and societies.
- **Understanding of Literary and Artistic Expression:** Students will develop their understanding of and appreciation of the various creative literary and artistic endeavors.
- **Understanding the Bases of Individual and Social Behavior:** Students will develop their understanding of the nature of human behavior.
- **Understanding the Physical and Biological World:** Students will develop their understanding of the natural environment in which we live and the forces that have shaped it.

3. ***Responsibilities of the Individual in Society***

- **Community and Civic Engagement:** Students will become informed and active members of their communities who understand local, national, and global governance systems and contemporary challenges.
- **Social and Ethical Awareness:** Students will have the ability to recognize and address ethical questions, to make reasoned judgments about alternative solutions, and to adhere to ethical standards in their academic, personal, and professional pursuits.

Our students will achieve these learning goals through a variety of campus experiences, including general education or core requirements, high-impact practices, and extracurricular activities. We recognize that the schools within Rutgers–New Brunswick offer many different perspectives on these goals, and while we have examined how the various existing general education requirements align with them, we have not made recommendations on how the schools should meet these goals. Instead, we recommend that the faculty of each school in Rutgers–New Brunswick examine their curriculum and other graduation requirements and define how they will meet these goals.

Recommendation 2.2. We recommend that the learning goals be reviewed regularly, and a process for assessing learning outcomes to achieve goals be developed.

Chapter 3 | Beginning the Rutgers–New Brunswick Experience: Recruiting and Enrolling Our Students

The process of helping our students navigate Rutgers–New Brunswick begins with recruiting, and ultimately, admitting students. Our marketing and recruitment materials can help prospective and new students understand the opportunities available at Rutgers–New Brunswick and its various schools, while helping our institution attract a diverse and highly qualified student body. Expanding our diversity aligns with the university’s commitment to this issue and contributes to one of the key factors that distinguishes Rutgers–New Brunswick and makes it attractive to students.

The Enrollment and Marketing workstream explored various recruitment options including different models for the demographic mix of students and tools available to help cultivate prospects and ensure their matriculation. The workstream also focused on how to convey the value of Discovery Advantage to prospective students, parents, guidance counselors, and other audiences, and how to differentiate Rutgers–New Brunswick from its peer institutions while emphasizing the importance of a Rutgers–New Brunswick degree for the individual within a national and global context. To achieve our goals, we recommend developing a multi-channel enrollment marketing plan that focuses on the following recommendations and a structured enrollment growth plan.

Recommendation 3.1. We recommend increased marketing and recruitment efforts in key out-of-state and international markets.

An increased effort in marketing and recruitment in key out-of-state and international markets will help increase and diversify the applicant pool, attract non-New Jersey residents, and increase out-of-state tuition revenue.

Recommendation 3.2. We recommend that the Division of Enrollment Management, Rutgers Communications and Marketing, and the State of New Jersey Division of Travel and Tourism develop a strategic plan to effectively market New Jersey as a destination for students.

This collaborative work will help enhance New Jersey’s standing as a premier national and international destination, thereby increasing interest in Rutgers–New Brunswick across out-of-state and international markets.

Recommendation 3.3. We recommend that Rutgers–New Brunswick develop tuition discounting models for out-of-state and international students.

Institutional grant aid for out-of-state and international students will provide more competitive financial aid packages for this population—helping to increase enrollment.

Recommendation 3.4. We recommend that Rutgers–New Brunswick remain test-optional going forward. Enrollment management, in consultation with academic leadership, will continue to review its admissions policies and procedures on a yearly basis and can recommend further changes as necessary.

As the higher education and admissions landscape continues to evolve, standardized testing has become a barrier to accessibility. Over the last three years, with the establishment of the test-optional policy, first-year enrolled classes have become more diverse. In 2020, 18.4 percent of our incoming first-year students were underrepresented (URM) students. In 2022, that population grew to 23.2 percent.

Recommendation 3.5. We recommend that Rutgers–New Brunswick should implement new marketing attribution and personalization technology.

This will help improve out-of-state enrollment goals, establish marketing automation for Undergraduate Admissions, and increase engagement.

Recommendation 3.6. We recommend increased cross-functional enrollment work across admissions, central communications, and school communicators to push forward marketing and communications recruitment efforts under one brand while sharing resources.

Deep collaboration across Rutgers–New Brunswick schools will remove duplication of efforts and increase efficiencies in a decentralized structure.

Recommendation 3.7. We recommend increased Division of Enrollment Management staffing.

Increased staffing within the Division of Enrollment Management will help to support the 10,000 to 15,000 projected increase in first-year applications due to the move to the Common Application. The associated workload resulting from increased applications is distributed throughout the year and not tied to a specific timeframe in the application and onboarding cycle, making increased full-time staffing a necessity.

Recommendation 3.8. We recommend that the Common Application fee revenue be reinvested into the Division of Enrollment Management.

Reinvestment of the Common Application fee revenue into the Division of Enrollment Management will help to support staffing, programming, and marketing initiatives to achieve Rutgers–New Brunswick enrollment goals and effective support of students from application to graduation.

Chapter 4 | Enhancing the Student Experience: Improving Belonging and Retention Through High-Impact Practices

Many factors contribute to student retention and a sense of belonging on campus, and much of the work of several workstreams explored options for improving these aspects of the student experience. A number of curricular and co-curricular experiences have been shown to help students develop a sense of belonging and improve retention, especially for first-year students. These may include first-year seminars, transfer seminars, undergraduate research experiences, and learning communities. Rutgers–New Brunswick already offers a number of these programs, but there is little coordination among them, and students often do not recognize the importance of these courses as enhancements of their academic careers and their preparation for post-graduation success. Our recommendations, therefore, center on enhancing coordination, connecting experiences to learning goals, encouraging students to explore these options, and ensuring that the experiences truly fulfill their purposes.

The phrase “high-impact practices” (HIP) denotes a set of teaching and learning practices with specific criteria that involve an investment of time, critical thinking and reflection, and promote meaningful connection with faculty, mentors, and peers. These criteria, along with others, when used in the classroom and in some co-curricular settings, have been shown to promote student success by yielding tangible benefits in terms of student retention, timely graduation, and skill development that promotes post-graduation success. HIPs include “high-impact experiential learning” (HIEL). Among other benefits, such programs provide students with an increased sense of belonging; awareness of the spectrum of resources available to students at the university; connection with peers, professors, and mentors; and an expanded understanding of career readiness.

As such, HIPs/HIELs at Rutgers–New Brunswick can serve as a foundation for helping students understand Rutgers–New Brunswick’s institutional values and those of its host communities and inspire students to make a difference on campus and beyond. HIPs/HIELs at Rutgers–New Brunswick align with the AMP’s Student Success Pillar by creating a welcome, equitable, and supportive learning environment; facilitating on-time graduation with minimal debt for all students; and expanding high-impact learning opportunities to better prepare students for future success. HIPs can help actualize our commitment to access, equity, and inclusion and ensure Rutgers–New Brunswick is responsive to the growing needs and challenges of our students, including in a culture affected by the pandemic.

Learning communities and living-learning communities (LLCs) are widely regarded as high-impact practices (HIPs) that can increase student retention and help students develop a sense of community, and they may form a bridge between courses, HIPs (e.g., First-Year Interest Group Seminars [FIGS]), and residential programs. Other forms of special interest housing may also contribute to a sense of community among students. The Living-Learning Communities workstream explored options for leveraging the residential experience to support the student success goals. Specifically, first-year residential communities can play an important role in students’ transition to campus, expose them to campus resources, contribute to a sense of belonging and community engagement, and help improve first-year to second-year retention and, ultimately, overall retention by equipping students with the foundational blocks needed to be successful at Rutgers–New Brunswick.

Recommendation 4.1. In light of the well documented benefits of HIPs/HIELs, we recommend that all Rutgers–New Brunswick students should participate in one HIP during their first year (transfer students during their first semester) and at least two others before graduation.

HIPs should be available across class years and include HIELs. Particular attention should be given to developing HIPs suitable for second-year students in that our first-year retention rates are relatively strong, but second year presents another retention cliff. Methods of incentivizing participation, such as credentialing, should be explored.

Recommendation 4.2. To ensure that the courses, programs, and practices labeled as HIPs/HIELs at Rutgers–New Brunswick deliver on their promise to increase retention, promote timely graduation, and ensure our students are well equipped for post-graduation success, we recommend that a Central HIP Committee of faculty, student affairs professionals, advisors, etc., be created to vet and curate HIPs/HIELs offered to Rutgers–New Brunswick students.

Recommendation 4.3. Drawing from the scholarly literature, we recommend that the Central HIP Committee employ a rubric to vet existing programs, to guide any recommendations for modification to fit HIP/HIEL criteria, and to support the development of new HIPs and HIELs. Criteria should include:

- Articulated and assessable goals
- Sustained structured interactions with faculty member, advisor, supervisor, or peer mentors
- Critical reflection and/or integrated learning and frequent feedback
- Incorporation and affirmation of diverse perspectives
- Real-world application and/or alignment with career goals

To ensure that the courses, programs, and practices labeled as HIPs/HIELs at Rutgers–New Brunswick deliver on their promise to increase retention, promote timely graduation, and ensure our students are well equipped for post-graduation success, a literature-based rubric should be used.

Recommendation 4.4. To ensure that our students benefit from HIPs/HIELs, we recommend that materials (e.g., a website, digital assets, print material) should be developed to help students, parents, faculty, advisors, and staff understand the benefits of HIPs, the full range of HIPs/HIELs available, and how students can access them at Rutgers–New Brunswick. HIPs/HIELs should also be incorporated into Curriculum Maps.

Recommendation 4.5. To ensure that the courses, programs, and practices labeled as HIPs/HIELs at Rutgers–New Brunswick deliver on their promise, we recommend the development of a system for assessment and outcome reporting.

Recommendation 4.6. We recommend that Rutgers–New Brunswick improve the structural support of experiential learning opportunities to enable units to categorize and monitor participation in HIPs/HIELs.

Recommendation 4.7. We recommend that Rutgers–New Brunswick take appropriate steps to promote equitable access to career preparation and experiential education resources for all students.

All students should be able to access HIPs, HIELs, and other experiential education opportunities. This requires ensuring that students are aware of these opportunities and do not face barriers, financial or

otherwise, that prevent them from participating in these opportunities. To evaluate whether this goal is being met, there need to be robust methods for identifying the opportunities and tracking participation.

Recommendation 4.8. We recommend that Rutgers–New Brunswick provide opportunities for students to access meaningful on-campus employment opportunities as a means for students to earn a wage while accessing professional development resources.

Meaningful on-campus employment opportunities have been demonstrated to promote retention and academic success compared to off-campus employment. Enriching on-campus employment with access to professional development resources enhances equity, particularly for those students who cannot afford to participate in an off-campus internship.

Recommendation 4.9. We recommend that Rutgers–New Brunswick establish Discovery First-Year Neighborhoods on College Avenue, Busch, Livingston, Douglass, and Cook campuses to include residential students and affiliated commuter students.

Discovery First-Year Neighborhoods may exist as a single residence hall or a cluster dedicated to the first-year experience and student success. They would help students establish themselves within a cohort community and the broader campus community.

Recommendation 4.10. We recommend that each neighborhood have a “Faculty Lead” who will provide collaborative leadership and oversight for the functioning of their Discovery First-Year Neighborhood, and that each neighborhood include live-in faculty.

Faculty Leads would convene the principals from their neighborhood; work with Residence Life to develop living and learning programs within their community; establish collaborations with academic schools on their campus (e.g., School of Engineering on Busch campus); and oversee student success programming for their students. Live-in faculty will serve under the Faculty Lead, reside in the Discovery First-Year Neighborhoods, contribute to the life of each community, and assist in achieving the overarching goals of Discovery Advantage.

Recommendation 4.11. We recommend that each neighborhood have (an) on-site “Student Success Advisor(s)” who would serve as an immediate point of contact for students affiliated with a Neighborhood.

Success Advisors would be generalist advisors trained in academic and career advising, student success strategies, and engagement opportunities.

Recommendation 4.12. We recommend that each Discovery First-Year Neighborhood have a ScarletWell Counselor who will serve as an embedded counselor and collaborative coordinator of wellness activities.

ScarletWell in Residence will include embedded mental health counseling, health education programming inclusive of relationship violence awareness, mindfulness practices, and recreation opportunities.

Recommendation 4.13. We recommend that each Discovery First-Year Neighborhood include a series of LLCs and thematic communities that will create smaller cohort experiences for students.

LLCs will provide students with an excellent opportunity to self-select into smaller communities of academic, career, and personal interests. These communities will provide diverse ways to develop new learning opportunities for students in partnership with the schools, provide community-specific supports, and, more importantly, allow choice for incoming students—a hallmark of the Rutgers–New Brunswick community.

Recommendation 4.14. We recommend that each Discovery First-Year Neighborhood develop a residential programming model grounded in the concept of civic engagement.

The programming models will focus on the following sub-themes: Common Good, Beloved Community, “Where We Live, Learn, and Play” (New Brunswick/Piscataway), and Campus Citizenship. This focus will serve as a foundation for helping students understand Rutgers–New Brunswick’s institutional values and those of its host communities and inspire students to make a difference on campus and beyond.

Recommendation 4.15. We recommend that each Discovery First-Year Neighborhood develop a peer mentor program, whose mentors will assist with advising, mentoring and success coaching, community development, and programming and outreach.

When faced with challenges, students are more likely to confide in their fellow students than in faculty or staff. Rutgers–New Brunswick’s peer-based programs can be leveraged in proposed neighborhoods.

Recommendation 4.16. We recommend that each Discovery First-Year Neighborhood have dedicated spaces for studying, activities, and wellness.

Benefits include more engagement in collaborative learning and enriching student-student and student-faculty interactions.

Recommendation 4.17. We recommend that each Discovery First-Year Neighborhood have an Engagement Center, a designated location for students seeking help with questions, concerns, advising, and connecting with in-residence faculty.

Each Discovery First-Year Neighborhood will have a "Neighborhood Engagement Center," where the key staff for each neighborhood will be located.

Chapter 5 | Enhancing Student Retention: Financial Aid Policies and Procedures

Financial aid, financial and registration policies, and financial literacy are critical components of retaining students and achieving our goal of helping students graduate with minimal debt. The Enrollment and Marketing workstream explored various retention options, including methods for strategically leveraging financial aid to support and retain students and current policies and practices to improve the student experience. The workstream held the students’ best interests as its guiding principle.

Recommendation 5.1. We recommend continued focus on Oracle Student Financial Planning (OSFP) challenges and that steps be taken to avoid similar issues moving forward.

These challenges represent issues so detrimental to our students that we believe this should be our highest priority. In addition, Rutgers–New Brunswick needs to ensure that, moving forward, the institution embraces collaboration, transparency, and feedback when selecting software vendors. The process should include input from staff and faculty with content-level expertise. It should also include transition periods when migrating to new systems to ensure staff can appropriately address and resolve student inquiries, and it should integrate project management support from the university Project Management Office (PMO) to assist with organizing, tracking, and communicating system challenges and enhancement requests.

Recommendation 5.2. We recommend that Rutgers–New Brunswick begin proactive preparation for the FAFSA Simplification Act implementation.

Utilizing the [National Association of Student Financial Aid Administrators](#) (NASFAA) resources, Rutgers–New Brunswick should convene a FAFSA Simplification Taskforce with representatives across the university to prepare for the major overhaul of financial aid methodology and the downstream impacts on current and future students, including necessary system changes. We must also estimate the institutional budget impact of Pell Grant and Student Aid index changes; this will help ensure the fiscal strength of the university. Enrollment Management must work with the Office of Information Technology (OIT) and University Enrollment Services (UES) to ensure OSFP supports all system changes necessitated by the FAFSA Simplification Act and updates university policies and procedures, communications and outreach, and staff training.

Recommendation 5.3. We recommend that Rutgers–New Brunswick implement improvements to the Satisfactory Academic Progress (SAP) Annual Evaluation process.

We should establish further integration of financial aid and advising efforts at the university to allow for more proactive education and holistic student support. This requires empowering the Rutgers–New Brunswick Division of Enrollment Management, in collaboration with Rutgers–New Brunswick schools and the Advising and Academic Support workstream, to educate students from the time of admission about their awards and eligibility requirements, including SAP. Mid-year, and periodically, there should be a system to notify students if they are at risk of failing to meet SAP requirements and help to identify a path toward resolution via connections with academic, financial, and personal resources at the university. Students seeking reduced course loads or mid-semester withdrawals for health-related matters should fully understand the potential impact on SAP and the importance of having a plan. We should continue to effectively promote and leverage existing financial literacy resources (ScarletSense) to educate students about various facets of financial responsibilities and strategies and review and update the content on the current [Student Success website](#), specifically regarding financial assistance and aid, to further assist students with access to current and digestible information.

Recommendation 5.4. We recommend that Rutgers–New Brunswick implement proactive intervention to positively impact student retention.

We should provide early, targeted engagement with students during the registration process; this will allow better understanding of the impediments students face, help resolve resource-related or personal issues, and prevent or reduce late registration. This includes publishing myRutgers dashboard reminders about preregistration, encouraging school leadership to reach out to students who are not registered (a

process that must begin with the regular creation of lists of such students), embedding financial aid outreach into the withdrawal process for students who indicate financial challenges, and reviewing the widgets on the student-facing myRutgers Dashboard to ensure relevant resources are easily accessible. In line with the Advising and Academic Support workstream recommendations (see Chapter 6 and below), we should identify opportunities to create consistent enrollment deadlines and processes, as well as a universal undergraduate academic calendar.

Recommendation 5.5. We recommend that Rutgers–New Brunswick implement a One Stop Certification initiative to empower university partners and streamline the student experience.

The One Stop Student Services Center is implementing a One Stop Certification initiative to improve staff and faculty awareness of basic but critical registrar, financial aid, and student accounting functions and processes. The initiative will leverage gamified training sessions and badging to empower university partners to resolve basic student issues. Currently, the promotion and deployment of these resources has been delayed due to pervasive OSFP system issues.

Recommendation 5.6. We recommend that Rutgers–New Brunswick implement a rebranding strategy to streamline web communication related to student services.

We recommend that scarlethub.rutgers.edu be rebranded as onestop.rutgers.edu to align the web presence with the university’s branding and to create a unified platform for student services. Student-facing student accounting information should be migrated from finance.rutgers.edu/student-abc to onestop.rutgers.edu, to centralize resources and reduce student confusion. Students will experience a more user-friendly interface that aligns information with support and enhanced communication efforts.

Chapter 6 | Navigating the Rutgers–New Brunswick Academic Experience

The size of Rutgers–New Brunswick and the sheer number of courses, majors, programs, co-curricular and extra-curricular experiences are among both its greatest strengths and its greatest challenges. Both students and their parents cite the many opportunities at Rutgers–New Brunswick as one of the factors that makes it attractive, and a number of students include it as one of the factors they most like about the university. At the same time, the number of options and opportunities, which may be poorly advertised or scattered among many departments and programs, makes it difficult for students to navigate and choose among them. Compounding these issues are challenges with advising; many students (and their parents) noted that they were dissatisfied with advising. Students noted that they often did not know whom to talk with about a particular question and that they had difficulty scheduling appointments with advisors. Unfortunately, this means that many students rely on advice from other students, parents, or Reddit. Discovery Advantage workstreams have developed proposals in two targeted areas which we believe will provide a major improvement in navigating the university: curriculum mapping and advising, or more broadly, academic support. Ultimately, enabling students to better navigate the university will also help improve retention and time to graduation.

Curriculum Mapping

A curriculum map is a powerful tool that provides students with a visual representation or a structured outline to navigate the complex landscape of an academic institution. Students can use the map to effectively guide their college experience, including academic (major/minor/study abroad); advising

(general/major/minor/career); academic support; and extra-curricular, including on-campus as well as service and outreach activities, networking, and career development opportunities. The map can help students navigate the multifaceted opportunities and challenges within the university setting. It is expected that the map will also encourage students to seek advising, help frame advising sessions, and facilitate on-time graduation. The Curriculum Mapping subcommittee of the Curriculum workstream has created a template that can serve as a starting point for future versions of the curriculum map (see Appendix V). Each major will be able to tailor the map. In addition, there can be a map to guide students who are still deciding on a major, or on a career path (see Appendix Q). We propose to refer to the map as the “Rutgers Pathways to Success” or “Your Guide to a Successful Rutgers Experience.”

Recommendation 6.1. We recommend that Rutgers–New Brunswick adopt curriculum mapping, following the proposed template and modified for each major, to help students better navigate the many curricular and co-curricular options available.

Recommendation 6.2. We further recommend that these curriculum maps be integrated into the student experience through the following steps:

- Introduce the map during New Student Orientation.
- Incorporate the map into the peer advising programs on campus.
- Integrate the map into Canvas and/or Degree Navigator.
- Link the map to departmental websites from a central location.
- Establish coordinated and consistent communication.
 - Market the maps to students, parents, and other external stakeholders.
 - What do they need to know, when do they need to know it, and how do they need to hear it?
 - Build on “Explore Our Programs” page.
 - <https://newbrunswick.rutgers.edu/academics/explore-undergraduate-programs>
- Provide training to students, staff, professional and faculty advisors, peer mentors and undergraduate program directors on how to effectively use the map. Include an openly accessible training video on the main Curriculum Map web page.

Recommendation 6.3. We recommend that these curricular maps undergo rigorous assessment to measure student, advisor, and faculty engagement with the map.

To truly assess the impact of curriculum maps, we should establish a committee that provides oversight and regularly assesses and revisits the use and usefulness of the map, implementing a mechanism for regular review and updating by departments. This committee should measure student, advisor and faculty engagement with the map, evaluating whether and how the map is being used and whether it is making an impact on student success/time to degree/retention. Individual departments should also be invited to regularly assess and update their tailored version of the map.

Advising and Academic Support

Students’ success at and beyond Rutgers–New Brunswick can be shaped as much by their experiences adjacent to the classroom—i.e., in the contexts of academic advising, career preparation, and academic support—as by their experiences in the classroom. The Advising & Academic Support workstream (A&ASC) has assessed the current infrastructure at Rutgers–New Brunswick in these areas, identified several key limitations to its effectiveness, and developed recommendations for the future. These

recommendations are primarily driven by a set of high-level design principles or overarching goals that emerged organically as the workstream considered inputs from focus groups, previous reports, and its own deep history of engagement across the Rutgers–New Brunswick campus.

The recommendations are founded upon the belief that all students must have equitable access to comprehensive and high-quality academic advising, career preparation, and learning assistance. Equity of access cannot rely on voluntary use of services. Inclusive and sometimes intrusive advising and academic support should be part of all students’ experience during their first year at Rutgers–New Brunswick and continue at key milestones throughout their academic career.

Recommendation 6.4. We recommend that Rutgers–New Brunswick establish a new campuswide advising website (e.g., <https://newbrunswick.rutgers.edu/advising/>) to serve the needs of new and continuing students, as well as the needs of staff and faculty serving in advising roles. As part of this effort, Rutgers–New Brunswick must develop interactive “advising maps” to complement the curriculum maps, laying out what types of advisors a given student should reach out to and at what junctures in their undergraduate career.

This website should be aligned with the success.rutgers.edu website and introduce the general philosophy of advising (e.g., the idea that one can consult an advisor without having a specific question), definitions of advising and student/advisor responsibilities, the various types of advising available at Rutgers (e.g., academic vs. career, and department-based vs. school-based), and the pathways for contacting advisors of different types.

Recommendation 6.5. We recommend that Rutgers–New Brunswick develop a communications plan to share time-sensitive information and targeted resources to students across the academic year.

In order to reach students with critical information, Rutgers—New Brunswick needs a communication plan that expands on email outreach, which is often ineffective.

Recommendation 6.6. We recommend that Rutgers–New Brunswick provide greater support to faculty in communicating with students about advising, learning assistance, career preparation, and cultivating civic values and skills.

This objective can be achieved by (a) incorporating academic support and advising information into faculty onboarding; (b) maintaining a Canvas site for new faculty; (c) broadening communication channels so that faculty and support staff receive the same messaging when relevant; and (d) providing a standardized message about learning assistance services that can be included on each syllabus or Canvas course site.

Recommendation 6.7. We recommend that Rutgers–New Brunswick ensure that student-to-advisor ratios (for both academic advising and career preparation) are sufficiently low to allow for timely individualized support.

Current student-to-adviser ratios at the Rutgers–New Brunswick schools are substantially higher than at peer institutions and the recommendations of the Boyer 2030 report. For academic advising, we recommend adopting the guidance of the [Boyer 2030 report](#) and having a ratio of matriculants to school-level professional, full-time advisors of no more than 250 to 1 and a matriculant to faculty advisor

ratio of no more than 25 to 1 when faculty are providing general advising. For career preparation, the ratio of students to career advisers in the Career Exploration and Success (CES) office should be no higher than 2,778:1 (midpoint of AAU institutions surveyed in 2019). The high caseloads lead to students experiencing long wait times to see academic advisers and limit advisers' ability to conduct early and more proactive interventions.

Recommendation 6.8. We recommend that Rutgers–New Brunswick adopt a more consciously proactive approach to advising at all levels.

Student success and well-being requires students to have easy access to information and support when they need it. Many students do not know where, or even when, to ask for help. Some students are even reluctant to seek help. Proactive advising approaches provide more effective and equitable support. Advisers intervene in response to early warning signs and anticipate the support student needs based on where they are in their academic journey.

Recommendation 6.9. We recommend that each Rutgers–New Brunswick school require that every student successfully complete one course from an approved menu of transition-focused courses—building their sense of belonging, their knowledge of learning strategies, and their ability to navigate the campus and access its resources (e.g., advising and career exploration)—at some point during their first year of enrollment. These transition courses should be designed to meet the criteria of high-impact practices as defined in Chapter 4 and would therefore be the first-year high-impact course as described in recommendation 4.1.

Rutgers–New Brunswick is a large institution with many opportunities, but its size can often be overwhelming, and some students struggle to adjust. Transition courses have proven effective both at Rutgers–New Brunswick and peer institutions in helping students navigate resources and opportunities, adjust to new expectations for academic performance, and build communities.

Recommendation 6.10. We recommend that Rutgers–New Brunswick develop a more formal and reliable coordinated care network to respond to academic and personal risk indicators.

This network would build on the existing “Do Something” process but would involve more student support offices with the goal of providing more comprehensive coverage and care.

Recommendation 6.11. We recommend that Rutgers–New Brunswick support the growth of students' mentoring networks from their first through their final years on campus.

Students benefit from having many mentors throughout their academic journey. Although some mentoring relationships develop organically, providing equitable access to productive mentoring networks requires building new, and expanding existing, formal mentoring programs.

Recommendation 6.12. We recommend that Rutgers–New Brunswick create a pre-semester online introduction to the institution that is asynchronous and focuses on college expectations, the Rutgers–New Brunswick experience, and navigating resources.

This resource will be available to all students but may be especially valuable for those who are unable to attend New Student Orientation and will begin to build a sense of belonging before they arrive on campus.

Recommendation 6.13. We recommend that Rutgers–New Brunswick evolve toward the use of a single campuswide platform for sharing progress notes and data across all advising, learning assistance, and support offices.

Offices working with students do not consistently share information about students, and school-based advising offices use different note-sharing platforms. While many advising offices work closely with their school-based departments, gaps exist that complicate advisors’ ability to effectively refer students to departments and programs within and across schools.

Recommendation 6.14. We recommend that Rutgers–New Brunswick develop a new early warning system that provides more timely and more robust notifications.

Recommendation 6.15. We recommend that Rutgers–New Brunswick ensure that staff and faculty serving in advising and academic support roles are given opportunities for continued professional development.

In keeping with our recognition of academic advising, career advising, and learning assistance as professions, these opportunities should include online interactions and in-person events crossing department and school boundaries to facilitate a vigorous exchange of ideas within Rutgers–New Brunswick.

Recommendation 6.16. We recommend that Rutgers–New Brunswick create consistency in pay scales for academic support service providers.

Academic support roles should have clearly defined training requirements and pay scales that are consistent across departments to reduce the internal competition for talent and ensure a consistently high-quality experience for all students using services, regardless of the office providing the services. Wages must be equitable across full-time and part-time professional staff as well.

Recommendation 6.17. We recommend that Rutgers–New Brunswick establish an ongoing faculty and staff career engagement initiative.

Recommendation 6.18. We recommend that the Office of Undergraduate Education (OUE) within the Rutgers–New Brunswick chancellor’s office be rescoped to encompass academic advising, career preparation, and academic support, as well as address academic issues that cut across schools.

Recommendation 6.19. We recommend that the Rutgers–New Brunswick Office of Undergraduate Education (OUE) study the variables that impact student performance and broaden access to those interventions that are subsequently identified as successful.

Specific focus areas should include why students leave the university without graduating, what factors lead to delayed graduation, which efforts decrease DFW rates, and which interventions support retention, persistence, and success.

Recommendation 6.20. We recommend that the Rutgers–New Brunswick Office of Undergraduate Education (OUE) implement a learning strategies assessment as part of placement testing.

A learning strategies assessment will facilitate targeted outreach to individual students based on their specific needs and interests.

Recommendation 6.21. We recommend that Rutgers–New Brunswick create an assessment/testing center to facilitate a variety of types of testing, including:

- Accommodations for students with disabilities
- Proctored exams for online courses
- Placement testing
- Exam scheduling for large courses (to reduce the number of exams that are scheduled very late, on Sundays, or at times that are otherwise difficult for many commuting and non-traditional students)
- Research assessments

A testing center will provide more flexibility for faculty and students for scheduling examinations.

Recommendation 6.22. To ensure the long-term sustainability of the changes recommended here, we recommend that the Office for Undergraduate Education (OUE) arrange for the external review of Rutgers–New Brunswick’s performance in these areas (from top to bottom and including the OUE’s own role and effectiveness).

Chapter 7 | Understanding the Student Experience and Assessing Interventions: Data

Rutgers–New Brunswick, like our peers, collects ever-increasing volumes of data, particularly regarding our students. Pre-enrollment data, the comprehensive records of our enrolled students, and post-graduation and alumni data all contribute to a detailed record of future, current, and past students. Our abiding challenge, however, is to overcome barriers to Rutgers’ ability to effectively use these vast stores of data to better understand our students and improve their educational experience.

Rutgers–New Brunswick faces many of the same obstacles that impede the efforts of our peers in higher education: antiquated information systems combined with modern systems that have difficulty “speaking” to one another; challenges with data “ownership” and data “siloing” that inhibit effective data sharing, which often leads to a reliance on “shadow” systems that undermine trust in data; and a lack of clear data governance, which is necessary to build an institution-wide culture that supports data-informed decision-making.

Efforts to overhaul data practices can be inhibited by a failure to differentiate between the related, yet distinct, elements of a mature data ecosystem: the “data core,” which includes the databases that store data, the different software systems—both “homegrown” and third-party vendor platforms—that interface with those databases, and the servers that host both; data reporting—both internal and external—which refers to how data from those databases and software systems are “pulled,” managed, and tracked; and data analytics, which includes efforts to make sense of the reports and, perhaps more importantly, to use the data to proactively develop intervention strategies that help us improve.

Examples of data reporting include key records such as retention and graduation rates, which are tracked over time and help answer the broader question: How are we doing? Data analytics efforts, on the other hand, painstakingly drill into more granular data to identify and make sense of, for example, bottlenecks like courses with so-called high “DFW” rates (grades of D or F and withdrawal) that affect retention and graduation rates—in an effort to pinpoint specific intervention opportunities—to answer a fundamentally different question: How can we do better?

There’s a common refrain that accompanies every discussion regarding large-scale change at Rutgers–New Brunswick: We’re so big and, well, so complicated. Efforts to overhaul our institutional data capabilities have been shackled by the daunting scale of the undertaking, creating a crippling spiral: We have a proliferation of data systems and data reporting responsibilities, generating an ever-growing reliance on data, while at the same time being hampered by structural limitations that inhibit our ability to take informed action based on that data.

Creating and maintaining a responsible and reliable ecosystem to inform our overall student success efforts necessitates a frank assessment of the limitations of our current data core, data reporting, and data analytics; a well-articulated, multi-year plan to create a robust data governance structure to address those limitations; and the sustained institutional commitment required to create a culture of data-informed decision-making to support student success.

Of course, such an undertaking will require the necessary resources, the lack of which, in budget-constrained environments, threatens to halt these efforts before they even begin. But the costs for these resources are investments, not expenses. Using retention as simply one example, each percentage improvement in retention results in over \$1.25M in increased revenue per year. More importantly, of course, those data points represent our students, so increases in seemingly abstract metrics like retention rates reflect improved experiences and outcomes for our students and their overall educational success—which is our institutional mission.

Recommendation 7.1. We recommend that core institutional data be centrally managed and organized to ensure individual business area data is both clearly delineated and readily shareable where appropriate.

Recommendation 7.2. We recommend that all institutional data fields be reflected in a robust, easily navigable, institution-wide data dictionary, including both detailed definitions and uses and the names of the business area (trustees and stewards) for each set of fields. The business areas are responsible for the integrity of their data fields and for their regular maintenance.

Recommendation 7.3. We recommend that Rutgers–New Brunswick clearly delineate the meaning and purpose of external and internal institutional reporting, and prioritize efforts to build an easily accessible, robust, flexible internal reporting library to inform strategic planning, institutional initiatives, program development, and institutional self-assessment at the central, chancellor-led, school, and department and unit levels.

Recommendation 7.4. We recommend that business area leads direct internal reporting efforts to ensure that proper data fields are included and that the appropriate assumptions are guiding the use of the data from their business area. These efforts should include representation and plans to gather input and feedback from all levels that will make use of the reporting to ensure that it reflects the respective needs.

Recommendation 7.5. We recommend that regular training for users be provided at each level to make sure they understand what the reports do—and do not—represent and what they can and cannot be used for.

Recommendation 7.6. We recommend that a clear process be provided for central, chancellor-led, school, and department and units users to request new data reports. The process for new report creation should be overseen by a Data Council (see below under “Data Governance”).

Recommendation 7.7. To augment data reporting, we recommend that robust data analytics efforts be developed to help answer strategic questions at the central, chancellor-led, school, and department and unit levels using institutional data.

Recommendation 7.8. As with data reporting efforts, we recommend that business area leads direct data analytics efforts to ensure that proper data fields are included and that the appropriate assumptions guide the use of the data from their business area. These efforts should include representation and plans to gather input and feedback from all levels that will use these analyses.

Recommendation 7.9. We recommend that analytics teams that include representatives of the New Brunswick schools be given the ability to work with business area leads to request the data needed to assist with emerging analytics efforts.

Recommendation 7.10. Given the widespread use of Tableau, the enterprise-wide reporting and analytics tool, we recommend that the university provide regular training opportunities for staff at every level, including those required to access the increasing number of Tableau reports and those who create the reports. The workstream strongly advocates support for an active local Tableau User Group, in which experiences and best practices could be regularly exchanged.

Recommendation 7.11. We strongly recommend that Rutgers commit the time and resources to carefully design and implement a well-defined, multi-layered, interconnected data governance model that includes both structure and process, outlining clearly defined roles and responsibilities for both the individuals (positions, not individual people) and groups included in the overall data ecosystem, from the chief executive who is responsible for the strategic direction of the university and the senior administrators who oversee each of the business areas, to the functional leads who manage the day-to-day of these business areas, down through the chancellor-led, school, and departmental users who are

largely responsible for inputting institutional data and best placed to ensure both its accuracy and its application.

Well-defined data governance is both structure and process, outlining clearly defined roles and responsibilities for both the positions and groups included across the overall ecosystem. Though the final form might include some variation, the workstream proposes the following roles:

- *Data Owner*: The president of Rutgers, who is ultimately responsible for all institutional data, is the data owner. The data owner identifies and appoints the data trustees, who are accountable to the data owner and certify the data for their respective business areas.
- *Data Trustees*: The senior administrators overseeing every business area at the university (e.g., Registrar, Institutional Planning and Operations, Administration and Finance, University Human Resources, etc.) are the data trustees, responsible for all data collected in their business area. The data trustees identify and appoint data stewards.
- *Data Stewards*: The directors and area heads who directly oversee the institutional data in the respective business areas (e.g., Registrar, Enrollment Management, course scheduling, etc.). The data stewards are the subject matter experts for data in their business areas, responsible for understanding the meanings and values for all data captured in the Data Dictionary and for overseeing integrity and regular review. (Every data element captured in the Data Dictionary must have an assigned data trustee and data steward).
- *Data Users Group*: Includes representation from the chancellor-led and school levels, who help identify the necessary reports and analysis “on the ground,” confirm their value and utility, and provide feedback on revision through iteration.

In addition to the roles noted above, the data governance structure should include consideration for a data governance coordinator, the single point person empowered to oversee and manage data governance efforts; a designated senior business analyst; the executive vice president for academic affairs; the chief information officer; the vice president for institutional research and decision support; and senior representation from the Office of General Counsel and University Ethics and Compliance.

Chapter 8 | University Context: Central Services, Processes, and the Student Experience

The Rutgers–New Brunswick student experience exists within, and is influenced by, the larger institutional context of business and administrative services (referred to in this chapter as “Central Services”) and living, learning, and supportive spaces (the “Physical Environment”). Though these factors do not lie entirely within the purview of Discovery Advantage, several workstreams analyzed the ways these procedural and physical infrastructures affect our students, identified areas of concern, and made the recommendations provided herein. This is not intended to be an exhaustive examination of the central services and processes that may impact the student experience. However, some of the issues we encountered have a major impact on the student experience, and their impact speaks to the need for closer attention to these processes as we work to improve the environment for our campus community.

Central Services

Recommendation 8.1. Rutgers must ensure that all stages of the planning process for new software or business processes, including the choice of an appropriate software package or business program, should include many stakeholders, including faculty and staff content experts, end users, and the IT groups that will support them. (Adopted from the report of the Working Group on Technological Solutions for Student Success Working Group Report; see Appendix C for the Technological Solutions for Student Success: Working Group Report.)

Rutgers must embrace collaboration, transparency, and communitywide feedback when selecting software vendors. All software packages and business systems will have strengths and weaknesses, and it is critical to engage content specialists and end-users in defining our needs and identifying programs that most closely align with those needs. The convening of the Working Group on Technological Solutions for Student Success provides a model for a process for defining the needs of end-users and identifying the strengths and weaknesses of various software programs.

Recommendation 8.2. New software system integrations and the decommissioning of old systems must be led by the business area leads responsible for the associated data and processes, supported by OIT and the project management teams. This will ensure that the business area processes are properly understood and reflected in the final product.

Recommendation 8.3. New system integrations must include a transition period during which the new system runs “in parallel” with the existing system and processes for at least one business cycle prior to full use of the new system. End-users and IT support must be consulted during this transition. Systems must not be fully implemented until they are operating efficiently, and users are fully trained.

It is critical—and is standard procedure in many organizations—that old systems continue to be maintained and used during the transition period when migrating to new systems. This practice will enable evaluation of the new system by end-users to ensure staff can appropriately address and resolve issues. We also recommend the establishment of a mechanism to make necessary adjustments to such new systems by either university staff or the outside vendor until Rutgers fully implements the system. No system should be fully implemented until the university is certain that the system can handle the necessary volume at an institution of our size and that any glitches are minor and promptly correctible.

Recommendation 8.4. New system integrations must include detailed user information and well-articulated plans for both initial trainings—which should empower users to provide feedback and enhancement requests—and ongoing, regular training. For each integration, the university should designate a primary point of contact for questions and concerns.

Recommendation 8.5. We recommend that the university undertake a review of University Human Resources to ensure it appropriately serves the needs of the campus community and supports the work of our departments, schools, and programs.

Physical Environment

Recommendation 8.6. We recommend that Rutgers–New Brunswick invest in facilities and infrastructure enhancements to support the Discovery Advantage goals and recommendations and to advance campus life for all our student populations, including the creation of neighborhoods and support for learning communities.

Recommendation 8.7. We recommend that Rutgers–New Brunswick conduct a re-evaluation and update to the Rutgers 2030 physical plan and subsequent plans to ensure alignment with the Academic Master Plan, Discovery Advantage and the evolving needs of students, faculty, and staff.

