RUTGERS

THE STATE UNIVERSITY
OF NEW JERSEY

Committee on the Near- and Long-Term Impact of Instructional Technology

INTERIM REPORT

April 2015

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EXECUTIVE SUMMARY

The purpose of this interim report is to provide an update on the strategic planning activities of the Committee on the Near- and Long-Term Impact of Instructional Technology (henceforth referred to simply as the ITC).

The ITC is charged with assessing Rutgers' current educational technology infrastructure, comparing it to that of our peer and aspirational peer universities, and developing an institutional plan for the design, implementation, deployment, and assessment of innovative teaching technology. This charge is being executed in two phases. Phase I involves data collection, analysis and assessment that will be used to identify strategic goals and inform the strategic planning effort in Phase II. The Phase I endpoint is marked by this ITC Interim Report. Phase II involves the development and planning of specific initiatives that will advance us toward the achievement of our strategic goals and facilitate the tactical deployment of instructional technology in order to ensure that the University will continue to fulfill its mission in the 21st century. The Phase II endpoint will be marked by the submission of the ITC Final Report that describes these initiatives.

To achieve the Phase I objectives, the ITC was subdivided into four subcommittee working groups:

CLIMATE: this subcommittee was charged with collecting student and faculty data on current use of instructional technology at Rutgers, and how the technology is perceived.

ORGANIZATION/RESOURCES: this subcommittee was charged with preparing a university-wide inventory of existing organizations and resources at Rutgers that are associated with instructional technology.

PEDAGOGY: this subcommittee was charged with identifying pedagogical practices/strategies that best promote student learning, understanding how technologies can support and enhance these practices, and examining the current use of these practices by Rutgers University faculty and instructors.

PEERS & ASPIRANTS: this subcommittee was charged with providing insights about instructional technology and its management at peer and aspirational peer institutions.

Detailed reports from each of the subcommittees are provided in the interim report. Analysis of the data across all of the subcommittees revealed the following overarching themes:

1. Students and faculty generally prefer individual, face-to-face interactions, when such interactions are possible. Instructional technology is NOT about moving to totally online courses. It is about using technology to enhance instruction inside and outside the classroom. It is about learning.

2. Rutgers faculty and students are waiting for leadership. Most students like having technology integrated into their classes. Most faculty are open-minded about instructional technology use. Nonetheless, leadership to drive effective instructional technology initiatives will not come from either of these groups.

3. Other universities in the CIC are moving toward institutionalization of instructional technology, but at a slow pace, and with no clear front-runners. *Rutgers has the opportunity to emerge as a leader in instructional technology innovations.*

If Rutgers seizes this opportunity, it will enhance our reputation and make us more competitive in attracting and retaining outstanding students and faculty.

4. The broad use of instructional technology in higher education nationwide is inevitable in the coming decades. *The goal is to bring instructional technology facilities to Rutgers in a coordinated, sustainable, and forward-thinking way.*

5. Significant efforts and resources at Rutgers today are aimed toward helping students and faculty use instructional technology. However, s*trong coordination in making instructional technology part of the university conversation is needed to make the whole greater than the sum of its parts.*

The data from the subcommittees was used to guide discussions at a strategic ITC workshop in February 2015 with the aim to identify three strategic planning goals moving forward into Phase II: 1) advance the development and application of effective teaching methods and practices through the use of innovative instructional technology, 2) standardize and enhance traditional classroom spaces, develop technology-enabled alternative learning spaces, and build an infrastructure that virtually connects classrooms, students, and instructors, and 3) encourage and enable coordination, access, and effective exchange of information, content, and capability for and throughout the university community.

ACKNOWLEDGEMENTS

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CLIMATE SUBCOMMITTEE

OVERVIEW

The goal of the Climate Subcommittee was to identify the culture of instructional technology use at Rutgers University. The subcommittee developed and deployed in November of 2014 two anonymous surveys--one directed to faculty and another to students. Participants were asked to report on their experience with instructional technology during the 2013-2014 academic year. Questions targeted how faculty and students currently use technology both academically and personally. Other questions were designed to gauge their perceptions of the use and effectiveness of the technology. Additionally, data were collected about faculty professional development, support, and preferences.

SURVEY DEVELOPMENT AND PRE-TESTING

Work began on survey development in July 2014. Previous surveys from Rutgers and other institutions were acquired and analyzed. Preliminary surveys were developed in Qualtrics and reviewed by the committee. The modified surveys were then pre-tested by faculty, staff, and students and edited as needed.

SEE MORE IN THE APPENDIX

- Descriptive statistics of all faculty survey responses
- Descriptive statistics of all student survey responses

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RESULTS

Faculty

The survey was completed by 666 faculty members with 75% self-identifying as full-time faculty. Qualitative data were drawn from the 200-300 respondents to open-ended questions. Almost all faculty (96%) reported that they had access to a laptop and 82% had a smartphone. The majority of faculty (93%) reported that they taught face-to-face in the 2013-2014 academic year while only 14% indicated they had taught a course completely online. For faculty who indicated a preference, 62% identified face-to-face instruction as their most preferred modality for teaching. Instructional technology use was wide-

spread among the faculty, with almost 90% reporting they had created presentations and over half collaborated on shared documents, attended virtual sessions (e.g., Skype, Google Hangouts, Collaborate, Connect, GoToMeeting), and analyzed data with spreadsheets. In open-response questions, faculty cited an array of "innovative" uses of technology (e.g., gaming, visualization techniques, online/hybrid courses, social media, classroom response systems, faculty/student generated websites). Additionally, faculty were consumers of technology with the majority (80%) reporting that they watched videos and used electronic library resources. It is noteworthy that almost one-third of surveyed faculty indicated they had created and uploaded videos for academic reasons.

Faculty reported that they learned about instructional technology most often through online instructions followed by face-to-face training, one-on-one sessions, and collaborative efforts with colleagues. Additionally, faculty indicated that they preferred to learn about instructional technology via one-on-one sessions, online instructions/videos, collaborative efforts with colleagues, and face-to-face workshops. In the open-response questions, faculty also requested self-paced online training, customized trainings (e.g., to department/discipline, individual needs, and/or experience level), and frequent/flexible scheduling of trainings. About one-third of the faculty reported using University staff for technology support at least once a semester and reported that support to be effective. In the open ended questions, faculty requested additional and better-informed support staff, improved availability/immediacy of response, and greater clarity in whom to contact for support needs.

When asked to identify the challenges that limited their use of instructional technology, the majority of faculty agreed that the barriers were: students' use of technology for non-class purposes during class, the need for additional or better professional development, and the amount of time and effort required to implement. In response to open-ended questions, faculty included the need for consistent and reliable infrastructure (e.g., availability of functioning internet, computers/projectors in each classroom, computer/tablet for each student) and incentives for instructional technology use. Faculty also indicated that they would be interested in learning more about a number of technologies. The in-class technology that faculty indicated they were most interested in learning about was smartboards followed by clickers, annotation software, lecture capture, and web conferencing.

Most faculty agreed or strongly agreed that instructional technology can improve student learning.

Students

Of the 1,483 students who completed the survey, 70% reported they were undergraduates in the 2013-2014 academic year. The majority of students reported they had taken a face-to-face course and that format was ranked as the most preferred format for taking courses. Students reported almost universal access (98%) to a computer. Over 80% of the students indicated they brought a smartphone to every class. About 70% indicated that they had access to a laptop to take to class, but less than 30% reported bringing a laptop to every class. Almost three-quarters of the students reported that they used their computers once a week or more to complete class assignments, access course content, use a learning management system, conduct research, check their grades, and communicate with other students. The majority of students reported using technology for their courses to watch online videos, create presentations, utilize electronic library resources, and collaborate on shared documents. A higher percentage of students than faculty reported using the social media tools of Facebook and Twitter for personal use.

While the majority of students (70%) indicated that they agreed with the statement that their instructors used technology effectively, an almost equal percentage (71%) also agreed with the statement that their learning would be improved if their instructors used technology more effectively. Over 90% of the students agreed that it was useful to have their assignment grades posted online throughout the semester, and a quarter of the students reported that their instructors used technology too little to record grades online. Over three quarters of students agreed that a learning management system (e.g., Blackboard, Sakai, eCollege) enhances their learning and helps keep them organized. A little over one half of students agreed that they find the use of mobile devices distracting in class.

ORGANIZATION SUBCOMMITTEE

OVERVIEW

The goal of the Organization/Resources Subcommittee's work was to learn about the various units engaged in instructional technology at Rutgers and the services they provide. To reach this goal, an online survey was sent to over two hundred staff members affiliated with instructional technology at Rutgers. Recipients were asked to help gather information on every area that engages in some level of instructional technology by completing one form per unit and sharing it with their colleagues. For the purposes of the survey, a "unit" could be a department, office, group, or individual. Units included in the results support a minimum of at least one entire academic school or administrative unit. Units may engage in activities not related to instructional technology, as long as they provide some service related to instructional technology. Our goal was to identify how and where end users take advantage of instructional technology at Rutgers.

INSTRUCTIONAL TECHNOLOGY UNITS AT RUTGERS

The survey revealed forty-five units engaged in providing instructional technology support to faculty, staff, or students on the Camden, Biomedical and Health Sciences, New Brunswick, and Newark campuses. The results reveal a broad range in the scope and size of units, from large offices providing services across the Rutgers system to individuals supporting the faculty of one department. Six units serve all four

ORGANIZATION/RESOURCES SUBCOMMITTEE MEMBERSHIP

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Rutgers campuses: the Center for Online & Hybrid Learning and Instructional Technology, the Center for Teaching Advancement and Assessment Research, the Office of Disability Services, the Office of Information Technology, the Office of Instructional and Research Technology, and the Rutgers University Libraries. At the other end of the spectrum, twenty-seven units operate at the school or department level. However, this localization of services is not universal. While New Brunswick has sixteen units that operate at the department or school level, Camden has none. Instead, its five units providing instructional technology services operate across all of Rutgers-Camden.

HOW THE UNITS WORK TOGETHER

The survey revealed some formal organizational connections between the units. Twelve re-

porting units operate under the oversight of one of four larger units: the Division of Continuing Studies (which oversees the Center for Online & Hybrid Learning and Instructional Technology and the Center for Teaching Advancement and Assessment Research), School of Arts and Science Information Technology Office (which oversees instructional technology work performed in the Division of Life Sciences, the Laboratory for Computer Science, Mathematics, and Physics & Astronomy), the Office of Information Technology (which oversees OIT-Camden Computing Services, the Office of Instructional and Research Technology, and Newark Computing Services), and RU Libraries (which oversees the John Cotton Dana Library and the Paul Robeson Library).

Units did report several methods of working with their peers, from informal collaborations formed around various projects to regular meetings with their colleagues. Thirty-eight units reported participation in some Rutgers or inter-collegiate collaborative group. The most commonly listed formal collaborations are the Instructional Technology Specialists Group – cited by ten units – and the Committee on Institutional Cooperation, cited by five units. The Instructional Technology Specialists Group (ITS) is an organization of staff located across the Rutgers system who communicate through periodic meetings, Sakai, and an email list serve to share best practices or information and pool resources and knowledge for shared projects. Aside from ITS communications, the survey results do not point to a formal shared means for units to learn about the work of other units and publicize the availability of services to the Rutgers community.

INSTRUCTIONAL TECHNOLOGY SERVICES

Rutgers units provide more than twenty-nine different instructional technology services. Seventeen of these units provide some level of pedagogic training. The most commonly provided service is computer hardware/software purchasing or advising, provided by all but eight units. The least commonly supported services – when counted separately – are some level of assistance for individual learning management systems (LMSs): Blackboard (supported by 10 units), ePearson (9), and Moodle (9). Sakai is supported by eighteen different units. While oversight of general use classrooms is conducted primarily by one department at Camden, New Brunswick, and Newark, various units support department-controlled and alternative classroom spaces. Overall, the smaller units tend to be generalists, offering a large number of different instructional technology services to a smaller constituency.

INNOVATION

Twenty-five units engage or have engaged in developing new instructional technologies, including the creation of adaptive eLearning systems, virtual classroom environments, a video wall, tools for data analysis, learning management system modules, and classroom audio/visual solutions.

Overall, these innovations have generally been developed internally by individual units, with no formal mechanism to collectively leverage the technologies or facilitate their broad deployment to other Rutgers units.

SEE MORE IN THE APPENDIX

- Instructional Technology Units at Rutgers
- Instructional Technology Units Level of Coverage (Campus and Rutgers-wide)
- Instructional Technology Units Level of Coverage (School/Department Specific)
- Services Provided

PEDAGOGY SUBCOMMITTEE

OVERVIEW

The primary role of instructional technology is to serve evidence-based pedagogy. Consequently, a strategic plan to institutionalize instructional technology must consider first pedagogy that best promotes student learning. Toward that end, the pedagogy subcommittee was formed to explore these issues and their relationship to instructional technology. The overall goals for the pedagogical group were to 1) broadly identify pedagogical practices/strategies that best promote student learning; 2) identify how technologies can support and enhance these pedagogical practices; 3) examine the current use of these practices by Rutgers University faculty and instructors. This report provides an overview of the subcommittee's activities and the initial analysis of the survey data.

BACKGROUND

The literature review found that research broadly supports the effectiveness of a variety of teaching methods (e.g., lectures, small work groups, science labs, discussions, question and answer, capstone projects) and provides empirical evidence to support the learning theories which inform these methods (e.g. Behaviorism, Cognitivism, Social Constructivism) (National Research Council, 2000). Research also suggests that instructional technology is most successful when it is in line with the instructor's larger theoretical approach to learning. In other words, technology-based tools can enhance student performance when integrated into the curriculum and used in accordance with knowledge about learning. Technology-based tools have to be part of a coherent education approach (Benson & Ward, 2013; Schmidt et al., 2009; Zhao, Pugh, Sheldon, & Byers, 2002). Yet little is known about the efficacy of specific instructional technologies. Thus, the subcommittee was most interested in how instructional technology is being employed to support faculty members' pedagogical approaches and resources faculty may need to better integrate instructional technologies into the pedagogical strategies.

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Research also addresses the significance of instructor attitudes and beliefs in the adoption of instructional technology (e.g., McGrail, 2002). For instance, faculty member perceptions of the usefulness of technology were found to be a barrier to adoption (Buchanan, Sainter, & Saunders, 2013). In contrast, when organizational culture and infrastructure are perceived to support, value and reward pedagogy that integrates instructional technology, faculty may be more likely to use instructional technologies (Berryhill & Durrington, 2009; Zhao et al., 2002).

SURVEY DEVELOPMENT

The Pedagogy Subcommittee's survey to Rutgers University faculty examined several domains. First, the survey sought to identity the faculty member's pedagogical approach: *Transmissive* characterized by a stream of information broadcast to learners; *Dialogic* characterized by a discourse between participants; and/or *Collaborative/active* characterized by project and inquiry based active students (Bower, Hedberg, & Kuswara, 2010). Survey items further examined how faculty use instructional technology to support these larger pedagogical approaches (to engage in knowledge transmission, collaborative projects, etc). Survey items were adapted from extant assessment instruments concerning pedagogical approaches (Chan & Elliot, 2004) and the intersections of technological and pedagogical practices (Benson & Ward, 2013; Schmidt et al., 2009). The survey also queried faculty on their attitudes towards the educational and pedagogical value of instructional technology, as well as perceived and desired rewards and supports. Items in this domain are adopted from extant survey research (Johnsrud & Harada, 2005).

INITIAL FINDINGS

The survey was sent to faculty at Rutgers University from all four campuses. Six hundred and sixty-nine faculty responded. While the data is still undergoing analysis, initial findings include the following:

Respondent Characteristics

Of those who responded, the majority were on the New Brunswick (51.57%) campus. Seventy-nine percent (79%) self identified as full-time faculty/administrators and 21% identified as part-time faculty or adjuncts. Respondents indicated teaching graduate students (74%); undergraduate students (72%) and non-matriculated students (20%). Disciplines taught included STEM (30%); Health professions (30%); Professional schools (23%); Social sciences (20%); and, Arts & humanities (19%).

Pedagogical Approaches

Initial findings suggest that Rutgers faculty employ an eclectic pedagogical approach, utilizing a variety of pedagogical strategies that can be categorized as both transmissive and collaborative/active. For instance, on a Likert scale of 1 to 5 with 1 indicating strongly disagree and 5 indicating strongly agree, the mean response to the statement "I see my role as a facilitator. I try to provide opportunities and resources for my students to discover or construct concepts for themselves" was 4.15, indicating strong adherence to an active/constructionist teaching philosophy. The mean response on the statement, "I see my role as a subject expert where students learn best when I teach through explanation, show students how to do the work, and assign specific projects" was also 4.15, indicating a transmissive approach to teaching. Future analyses will examine these data more closely, to tease out possible relationships between pedagogical approaches and technology uses.

Instructional Technology Use

The majority (59%) of respondents reported using some form of instructional technology (e.g., classroom response systems, Wikis, threaded discussion, online assessments, synchronous web conferences, interactive games) in their courses.

Factors Relating to Instructional Technology Use

Respondents generally reported that they used instructional technology to improve pedagogy and enhance student learning. On a 1 to 5 Likert scale with 1 indicating strongly disagree and 5 indicating strongly agree the responses were as follows:

- "I utilize technology in my courses to better convey information and present material" Mean response = 4.3
- "I utilize technology in my courses to enhance student learning" Mean response = 4.38
- "I utilize technology in my courses to engage students" Mean response = 4.22

Departmental and administrative incentives appeared to play a smaller role in faculty adoption of instructional technology. On a 1 to 5 Likert scale with 1 indicating strongly disagree and 5 indicating strongly agree the responses were as follows:

- "I utilize technology because it improves my standing within my department." Mean response = 2.43
- "I utilize technology in my courses because I am encouraged by administrators (deans, chairs, directors, etc) to do so." Mean response = 2.57
- "I utilize technology in my courses because many of my colleagues do so." Mean response = 2.58

SEE MORE IN THE APPENDIX

- Descriptive statistics of all faculty survey responses

Instructional Technology Training

Initial findings indicate that respondents' use, knowledge of, and access to training and support for instructional technology may be limited. Twenty-three percent (23%) of respondents reported having ever sought assistance from an instructional designer to enhance classroom-based or online course design. On a 1 to 5 Likert scale with 1 indicating strongly disagree and 5 indicating strongly agree the responses were as follows:

- "I am aware of opportunities at Rutgers to receive training and in using technology to enhance instruction" Mean response = 3.27
- "I have had many opportunities to see how instructional technology is being used" Mean response = 2.76

The majority of respondents also indicated that they were moderately to extremely interested (81%) in "learning how technologies can be used to enhance student learning."

INTERIM IMPLICATIONS

Initial findings and analyses of the pedagogy survey data suggest the following:

- Faculty currently use a variety of pedagogical strategies
- Faculty who employ instructional technologies largely do so to enhance student learning
- Faculty do not perceive instructional technology use to be incentivized by their departments or by the university administration
- Faculty use and knowledge of instructional technology training may be limited
- Faculty are interested in more training and professional development opportunities

Survey data will continue to be analyzed. Ongoing analyses will examine the relationship between pedagogical strategies, the use of and attitudes towards instructional technologies, as well as the survey's qualitative responses.

PEERS & ASPIRANTS SUBCOMMITTEE

OVERVIEW

Planning for future instructional technology initiatives at Rutgers can be informed by those at our peer and aspirational peer research universities, particularly those underway at our fellow CIC (Committee for Institutional Cooperation) institutions. The Peers and Aspirants Subcommittee was formed to assess these advances, and it collected information through the following:

- Two surveys of CIC institutions (one of LMS usage, one of software categories conducted by the CIC affinity group)
- A lengthy survey of IT professionals representing CIC schools
- Interviews with key informants

Interviews with instructional technology leaders at other institutions suggest that important decisions must be made in the following areas.

INSTRUCTIONAL TECHNOLOGY INFRASTRUCTURE

Software

Current Learning Management Systems (LMS, e.g., Sakai, Blackboard) feature mature technologies, though none of these platforms clearly outshines the others. Institutional decisions concerning the adoption of a specific LMS are based on a number of factors (i.e., cost of the platform and maintenance and upgrade costs, feasibility of integration with legacy systems, flexibility and scalability). Rutgers currently supports a number of LMSs across the different schools, and any decisions about the full adoption of a singular LMS to complement instruction will need to consider these and other factors (the appendix includes an overview of the LMSs supported at our peer institutions). The most attractive LMSs distinguish themselves through their modularity—their ability to integrate well with other software packages, like video conferencing and lecture capture.

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Many of our peer institutions have undertaken initiatives to introduce institutional analytics to assess measures like student learning outcomes and progress towards degree--initiatives that make use of data from both LMSs and student information systems. While there is tremendous excitement about analytics, this is still a burgeoning area, and Rutgers should continue to research the feasibility, reliability, and practicality of these student success analytics programs before making long-term enterprise investments.

Teaching & Learning Spaces

Rutgers' peers and aspirational peers continue to introduce new formal and informal learning spaces intended to infuse technology into every facet of instruction. Many of these classrooms and informal spaces are intended to allow medium-sized classes to divide into small groups of students working on technology-supported activities, and to share their work with the entire class. These projects are largely designed around the so-called "flipped classroom," where instruction that was traditionally reserved for lecture periods is being moved online and is intended to be completed before class meetings; the classroom periods are then used for "active learning" and problem-solving exercises. While these teaching and learning spaces are often expensive to build and instructors need extensive support to utilize them effectively, they offer the possibility of transforming the learning experience.

One of the notable trends in teaching and learning spaces involves projects and initiatives that blur the boundaries of traditional classroom walls. Bolstered by the power and ubiquity of connective and collaborative technology, our peers and aspirational peers are investing in learning commons, learning centers, and informal study spaces, which provide tremendous opportunities for flexible, asynchronous teaching and learning.

INSTRUCTIONAL TECHNOLOGY ORGANIZATION

Leadership & Organizational Structure

The structural relationship between more traditional information technology (IT) offices and instructional technology units vary across our peer and aspirational peer institutions, but there is a clear trend toward recognizing the distinction between the missions of each and delineating that distinction structurally. Institutions with clear visions for instructional technology and senior leaders empowered to organize resources to achieve these visions have had considerable success. Survey respondents have indicated that institutional commitment is most effective when complemented by extensive, ongoing collaboration with the faculty. The subcommittee was particularly impressed with the structure of two of our peers, Indiana University and University of Minnesota, who are particularly transparent and deliberative with their instructional technology initiatives. Indiana University also impressed with their commitment to ongoing research and assessment of their initiatives.

Faculty Support

Well-structured, intentional faculty support is critical to successful instructional technology integration. Faculty have ongoing demands on their time, and efforts to rethink course design and course delivery through technology require significant investments. Many institutions encourage faculty to integrate instructional technology through a variety of incentives, including release time for the development of new instructional technologies, merit raises, and consideration in the tenure and promotion processes. Most importantly, successful instructional technology integration is faculty-centric, meaning faculty see it as integral and additive to the learning process.

Innovation Centers

Peer institutions reported considerable success through the support of faculty and staff innovation initiatives, which are often accomplished by providing the technology support necessary to translate ideas into learning technologies or through the awarding of grants to allow for the development of promising ideas. These types of innovation initiatives, again, give primacy to the role of the faculty in determining the best use of technology to achieve educational objectives; instructional technologists operate as collaborative support for these initiatives.

Institutional Collaborations

Many of our peer and aspirational peer research universities have formed collaborations to advance instructional technology: Apereo (of which Rutgers is a member), EdX, and Unizen are three examples. Such collaborations allow for advantages through leveraging scale for initiatives like testing analytics systems, and public, rather than private, ownership of new technologies. Rutgers should explore institutionalizing productive collaborations to best employ instructional technology on a broader scale.

The CIC, which now includes Rutgers, holds regular meetings for instructional technology professionals. The CIC Learning Technology (CIC-LT) group—which is made up of learning technology staff from CIC institutions, most of whom are directors or assistant/associate directors of their respective instructional technology units—meets in-person twice per year at one of the participating schools and two more times per year virtually. Rutgers representatives participated in the most recent meeting held at the University of Indiana, and they were impressed by the potential of this robust collaborative effort.

SEE MORE IN THE APPENDIX

- CIC Course Sections Survey on LMS Usage
- CIC Instructional Technology Spreadsheet

PEERS & ASPIRATIONAL PEERS

CIC INSTITUTIONS

Indiana University

Michigan State University

Northwestern University

Ohio State University

Pennsylvania State University

Purdue University

University of Chicago

University of Illinois

University of Iowa

University of Maryland

University of Michigan

University of Minnesota

University of Nebraska-Lincoln

University of Wisconsin-Madison

OTHER INSTITUTIONS

Colorado State University

George Mason University

Miami University-Ohio

CONCLUSION & NEXT STEPS

With this interim report, Phase I of the ITC strategic planning effort is complete. The information contained in this document has been used to identify the major strategic planning goals and, moving into Phase II, will guide the development of specific initiatives that will move Rutgers forward toward achieving these goals. Some of the overarching conclusions of this report are:

1. The broad integration of instructional technology into the learning cycle in higher education is a certainty, and yet, the mechanism to do this, and the technology itself, remains in its infancy. Taken together, these factors imply that there is tremendous opportunity for Rutgers to emerge as a leader in instructional technology innovations.

2. The development of infrastructure to enhance teaching and learning should include consideration of traditional and alternative classrooms and learning spaces, online eLearning tools, and software that allows students and instructors to more effectively interact.

3. The institutionalization of instructional technology at Rutgers needs a multi-faceted effort that is highly coordinated and ties together efforts to build infrastructure and support new technology innovations that enhance teaching and learning on a large scale.

An outcome of the Phase I data collection and analysis was the identification of three overarching strategic goals that emerged from an ITC workshop in February 2015:

INNOVATION: Advance the development and application of effective teaching methods and practices through the use of innovative instructional technology

INFRASTRUCTURE: Standardize and enhance traditional classroom spaces, develop technology-enabled alternative learning spaces, and build an infrastructure that virtually connects classrooms, students, and instructors

COORDINATION: Encourage and enable coordination, access, and effective exchange of information, content, and capability for and throughout the university community

Phase II will focus on the design of specific initiatives that will move the University forward toward achieving these goals.

REFERENCES

Benson, S. N. K., & Ward, C. L. (2013). Teaching with technology: Using TPACK to understand teaching expertise in online higher education. *Journal of Educational Computing Research*, 48, 153-172.

Berryhill, A. & Durrington, V. A. (2009). Instructional technology investments in higher education: Are faculty using the technology? *Media Review*, 15, 25-45.

Bower, M., Hedberg, J. G., & Kuswara, A. (2010). A framework for Web 2.0 learning design. E*ducational Media International, 47*, 177-198.

Buchanan, T., Sainter, P., & Saunders, G. (2013). Factors affecting faculty use of learning technologies: Implications for models of technology adoption. *Journal of Computing in Higher Education*, 25, 1-11.

Chan, K. & Elliott, R.G. (2004). Relational analysis of personal epistemology and conceptions about teaching and learning. *Teaching and Teacher Education*, 20, 817-831.

Johnsrud, J. K. & Harada, V. H. (2005). Faculty attitude, adoption, and application of technology in higher education: Implications for distance education policy. Retrieved December 10, 2014 from, http://files.eric.ed.gov/fulltext/ED540265.pdf

McGrail, E. (2002). "It's a double-edged sword, this technology business": Secondary English teachers' perspectives on a school laptop technology initiative. *Teachers College Record*, 108, 1055-1079.

Schmidt, D. A., Baran, E., Thompson A. D., Koehler, M. J., Mishra, P. & Shin, T. (2009). Technological pedagogical content knowledge (TPACK): The development and validation of an assessment instrument for preservice teachers. *Journal of Research on Technology in Education*, 42, 123-149.

Zhao, Y., Pugh, K., Sheldon, S. , & Beyers, J. (2002). Conditions for classroom technology innovations. *Teachers College Record,* 104, 482-515.

APPENDICES

Climate Subcommittee

Appendix A: Faculty Survey Descriptive Statistics
Appendix B: Student Survey Descriptive Statistics

Organization/Resources Subcommittee

Appendix C: Instructional Technology Units at Rutgers
Appendix D: Instructional Technology Units Level of Coverage (Campus and Rutgers-wide)
Appendix E: Instructional Technology Units Level of Coverage (School/Department Specific)
Appendix F: Services Provided

Pedagogy Subcommittee

Appendix G: Faculty Survey Descriptive Statistics

Peers & Aspirants Subcommittee

Appendix H: CIC Course Sections Survey on LMS Usage
Appendix I: CIC Instructional Technology Spreadsheet

CLIMATE SUBCOMMITTEE

Appendix A
Faculty Survey Descriptive Statistics

Faculty Instructional Technology Assessment Survey

Fall 2014

Publically available results for the 666 participants who completed the survey

1. How long have you been teaching in higher education?

#	Answer		Response	%
1	This is my first year		0	0%
2	Less than 5 years		113	17%
3	6-10 years		120	18%
4	More than 10 years		433	65%
	Total		666	100%

2. How long have you been teaching at Rutgers University/UMDNJ?

#	Answer		Response	%
1	This is my first year teaching at Rutgers		0	0%
2	Less than 5 years		185	28%
3	6-10 years		132	20%
4	More than 10 years		349	52%
	Total		666	100%

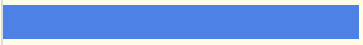
3. In the 2013-2014 academic year, with which campus and school were you primarily affiliated?

Answer	Total Responses
Rutgers University-New Brunswick ~ School of Arts & Sciences	150
Rutgers University-New Brunswick	117
Rutgers University-New Brunswick ~ School of Environmental & Biological Sci	44
Rutgers University-Newark ~ Newark College of Arts and Sciences	38
Rutgers University-Camden ~ Camden College of Arts & Sciences	36
Rutgers University-Camden	27
Rutgers University-New Brunswick ~ School of Communication & Info	23
Rutgers University-Newark	22
Rutgers University-Newark ~ Rutgers Business School - Newark/New Brunswick	21
Rutgers University-New Brunswick ~ Graduate School of Education	20
Rutgers University-New Brunswick ~ Bloustein School of Planning	19
Rutgers University-New Brunswick ~ School of Management & Labor Rel	16
Rutgers University-New Brunswick ~ School of Engineering	15
Rutgers University-Camden ~ Rutgers School of Law - Camden	13
Rutgers University-New Brunswick ~ School of Social Work	12
Rutgers University-New Brunswick ~ Mason Gross School of the Arts	12
Rutgers University-Newark ~ Rutgers School of Law - Newark	10
Rutgers University-New Brunswick ~ Rutgers Business School - Newark/New Brunswick	9
Rutgers University-Camden ~ Rutgers Business School - Camden	8
Rutgers University-New Brunswick ~ The Graduate School-New Brunswick	7
Rutgers Biomedical and Health Sciences ~ Ernest Mario School of Pharmacy	7
Rutgers University-Newark ~ School of Public Affairs & Admin	5
Rutgers University-Newark ~ The Graduate School-Newark	4
Rutgers Biomedical and Health Sciences ~ School of Nursing - Rutgers University-New Brunswick & Rutgers University-Newark campus	4
Rutgers University-Camden ~ The Graduate School-Camden	2
Rutgers University-New Brunswick ~ Grad School	2

of Applied & Prof Psych	
Rutgers University-New Brunswick ~ Continuous Education	2
Rutgers Biomedical and Health Sciences	2
Rutgers University-Camden ~ School of Nursing - Camden	2
Rutgers University-Newark ~ School of Social Work	2
Rutgers University-Newark ~ School of Criminal Justice	1
Rutgers Biomedical and Health Sciences ~ School of Biomedical Sciences	1
Rutgers Biomedical and Health Sciences ~ School of Public Health	1
Rutgers University-New Brunswick ~ School of Nursing - Rutgers University-New Brunswick & Rutgers University-Newark campus	1
Total	655

Statistic	Campus	School or College
Most Common	Rutgers University-New Brunswick (68.55%)	School of Arts & Sciences (30.8%)
Total Responses	655	487

4. Which best describes your teaching role at Rutgers University during the 2013-2014 academic year?

#	Answer		Response	%
1	Full time faculty		497	75%
2	Part time lecturer		145	22%
3	Not applicable		22	3%
	Total		664	100%

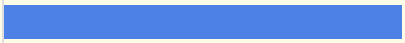
5. In the 2013-2014 academic year, in which format did you teach? (check all that apply)

#	Answer		Response
1	Face-to-face (traditional class where most meetings are held in person)		617
3	Online (no more than three in person class meetings for the duration of the course)		94
2	Hybrid (at least 1/3 of classes conducted online and remaining classes taught in person for the duration of the course)		74

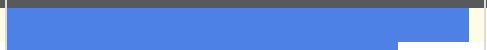
6. Drag and drop to rank the order of the format in which you prefer to teach with 1 being your most preferred.

#	Answer	1	2	3
1	Face-to-face (traditional class where most meetings are held in person)	136	51	33
2	Hybrid (at least 1/3 of classes conducted online and remaining classes taught in person for the duration of the course)	56	107	57
3	Online (no more than three in person class meetings for the duration of the course)	28	62	130
	Total	220	220	220

7. Have you ever been, or are you currently, a STUDENT in a course in the following formats? (check all that apply)

#	Answer		Response
2	Completely online (no more than three in person class meetings for the duration of the course)		97
1	Hybrid (at least 1/3 of classes conducted online and remaining classes taught in person for the duration of the course)		45

8. During the 2013-2014 academic year, which of the following did you own? (check all that apply)

#	Answer		Response
1	Laptop		642
3	Smartphone		543
2	Desktop computer		459
4	Tablet		400
5	eReader		181
6	None of the above		3

9. During the 2013-2014 academic year, did you do any of the following for academic and/or social/personal reasons?

#	Question	I did this for academic reasons.	I did this for social/personal reasons.
18	Created electronic presentations (e.g., PowerPoint, Prezi)	582	119
6	Watched online videos	544	539
10	Utilized electronic library resources	544	199
19	Analyzed data with spreadsheets	481	214
17	Attended virtual sessions (e.g., Skype, Google Hangouts, Collaborate, Connect, GoToMeeting)	419	249
14	Collaborated on shared documents (e.g., Google docs)	398	169
15	Read blogs	360	377
1	Sent text messages	312	578
20	Collected data via an online survey (Survey Monkey, Qualtrics, learning management software)	289	69
9	Read eBooks	252	342
11	Listened to podcasts	250	272
7	Created videos (e.g., narrated presentations, webcam videos, screencasts)	206	70
8	Uploaded videos to Internet	193	104
2	Sent instant messages/online chat	167	302
5	Utilized Facebook	147	388
3	Followed someone on Twitter	124	140
4	Sent out Tweets	87	107
13	Edited a wiki	79	34
16	Posted to my own blog	69	57
12	Created a podcast	38	16

10. In the 2013-2014 academic year, which of the following classroom instructional technologies did you use during your on-campus class meetings? Which ones would you like to learn more about?

#	Question	I used...	I would like to learn more about...	I would have used this technology, but it wasn't available in the classroom...
7	Smartboard	69	123	104
8	Personal response systems (e.g., clickers, online polls)	98	97	54
9	Annotation software	61	92	28
3	Tablet connected to classroom projector	78	92	54
12	Recording of live lecture	96	87	36
11	Web conferencing during class time (e.g., Skype, Collaborate/Elluminate, Adobe Connect, GoToMeeting, Google Hangouts)	124	78	30
6	Document camera	43	59	30
10	Webcam	98	41	26
4	University wireless to connect laptop, smartphone, or tablet.	396	35	33
1	Podium computer with projector	460	21	50
2	Laptop connected to classroom projector	508	17	12
5	DVD or Blu-ray player	204	8	11

11. In the 2013-2014 academic year, what was the personal response system (e.g., clickers) you used most frequently at Rutgers University?

#	Answer		Response
1	iClicker		37
3	Phone or laptop polling software (e.g., Top Hat, Poll Everywhere)		26
5	Other:		15
2	Turning Technology		11
4	I don't know		6
	Total		95

12. In the 2013-2014 academic year, how did you use a personal response system? (check all that apply)

#	Answer		Response
2	Pose questions to students during class		73
1	Take attendance		41
4	Group activities		32
6	Review for test or quiz		27
3	Administer tests or quizzes		24
5	Other:		12

13. Which best describes how often you would like to use a classroom with the following technology.

#	Question	Never	2-3 times a semester	Less than half the classes during a semester	More than half the classes during a semester	Every class
7	Students bring their own laptop	176	84	67	79	189
8	Students bring their own tablet	246	60	47	59	127
1	A classroom with a computer for every student	247	119	62	62	111
9	Students bring a smartphone	330	48	29	34	87
2	Mobile cart of laptops	354	60	28	21	44
6	Mobile cart of tablets	364	51	25	23	34

14. In the 2013-2014 academic year, how did you have students use computers in a classroom with computers? If you could have a classroom with computers in it, how would you like students to use the computers? (check all that apply)

#	Question	I had students....	I would like students to...	Total Responses
2	Work on projects	252	156	408
1	Conduct research	214	143	357
4	Access databases	188	151	339
6	Utilize specialized software	158	127	285
3	Take tests	76	123	199
5	Other	42	22	64

15. In the 2013-2014 academic year, did you use instructional technology regularly to do the following? What would you like to learn more about? (check all that apply)

#	Question	I did...	I would like to learn more about how to...
1	Use plagiarism detection software	258	135
2	Create online/narrated presentations for instruction	198	129
6	Communicate with full class of students via web conferencing outside of class meeting times (e.g., Skype, Collaborate/Elluminate, Google Hangouts, Adobe Connect, GoToMeeting)	83	128
13	Record live lecture	81	114
11	Facilitate online synchronous instructional sessions (e.g., live lecture, recitation)	51	114
7	Communicate with individual or small groups of students via web conferencing (e.g., Skype, Collaborate/Elluminate, Google Hangouts, Adobe Connect, GoToMeeting)	110	108
27	Create a simulation	37	100
9	Create a class blog	65	92
19	Create a class wiki	44	89
14	Provide closed caption or lecture transcripts	30	89
15	Create a VoiceThread	19	85
16	Map curriculum (e.g., with AEFIS)	5	77
12	Share an online course calendar	206	68
3	Share multimedia with students (e.g., via YouTube, Flickr, Kaltura)	322	52
4	Communicate with students via instant messaging (e.g., Google	191	39

	Chat, Sakai or eCollege/Pearson Chat)		
5	Interact with students via social networking (e.g., Twitter, Facebook, Pinterest)	61	39
17	Track student medical procedures (e.g., with axiUm)	3	26
18	Communicate with students via email	623	3

16. Which electronic survey program did you use? (check all that apply)

#	Answer		Response	%
1	Qualtrics		0	0%
2	SurveyMonkey		0	0%
3	Google Forms		0	0%
4	Other:		0	0%
5	Learning management system quiz/survey		0	0%

17. In the 2013-2014 academic year, which learning management system(s) (LMS) did you use while teaching at Rutgers University? (check all that apply)

#	Answer		Response
5	Sakai		449
1	Blackboard		152
3	eCollege/Pearson		124
7	Didn't use an LMS		40
6	Other:		27
4	Moodle		9
2	Canvas		3

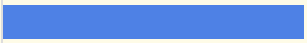
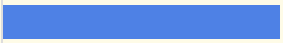
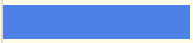
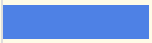
18. Which learning management system (LMS) do you prefer to use?

#	Answer		Response
5	Sakai		56
1	Blackboard		24
3	eCollege/Pearson		21
7	No preference		13
6	Other:		10
4	Moodle		2
2	Canvas		1
	Total		127

19. In the 2013-2014 academic year at Rutgers University, check all the ways you used a learning management system (LMS) to regularly do the following. Identify what you would like to learn more about. (check all that apply)

#	Question	I used an LMS to:	I would like to learn more about how to use an LMS to:	Total Responses
8	Teach a live online session (e.g., via Collaborate/Elluminate, Adobe Connect)	55	128	183
7	Administer tests or quizzes	174	77	251
4	Create online discussion	312	45	357
6	Enter/calculate student grades	387	35	422
5	Have students submit assignments (e.g., through the LMS dropbox, assignment tool)	408	26	434
1	Post content/materials (e.g., syllabus, documents, presentations, videos)	573	7	580
2	Send students emails	535	5	540
3	Make class announcements	560	4	564

20. In the 2013-2014 academic year, I had my STUDENTS use instructional technology to: (check all that apply)

#	Answer		Response
17	Present information to the class (e.g., via PowerPoint, Prezi, video)		366
3	Create an electronic presentation (e.g., using PowerPoint, Prezi, video)		346
2	Conduct research that required electronic library resources		337
14	Complete course evaluations		327
1	Access textbook publisher materials		227
7	Analyze data		192
5	Communicate electronically about academic content with experts, peers, and/or others		178
9	Collaborate using shared documents (e.g., Google Docs, ScarletApps)		135
15	Solve problems that involved situations, issues, and tasks that people tackle outside a classroom		98
4	Present information to an external audience (e.g., PowerPoint, Prezi, video)		76
6	Gather data through an electronic survey		70
12	Create or post to a blog		61
8	Create products for an external audience (e.g., website)		53
11	Create or contribute to a wiki		33
10	Utilize an online simulation		32

13	Create or respond to a VoiceThread		15

21. Which survey tool did your students use? (check all the apply)

#	Answer		Response
2	SurveyMonkey		31
3	Google Forms		27
1	Qualtrics		24
4	Student choice		12
5	Other:		8

22. In the 2013-2014 academic year, how did you HEAR ABOUT new instructional technology? (check all that apply)

#	Answer		Response
1	Shown or mentioned to me by colleague		346
4	Read about it in Rutgers University or Rutgers school email/bulletin		168
7	Received information from organization, professional publication, or journal article		128
5	Suggested at faculty meeting		109
10	Saw it on an external website		107
3	Saw it at conference		101
2	Shown or mentioned to me by student		99
6	Saw it on Rutgers University website		81
9	Other:		58
8	Saw it on social media (e.g., Twitter, Facebook)		50

23. I learned how to use technology via...

#	Question	Yes
5	Online instructions	260
1	Face-to-face training session with a group	170
7	"How to" video (e.g., YouTube video)	155
2	One-on-one session	148
3	Collaborative effort with colleagues	138
4	Webinar	102
8	Self-paced online course	62
6	Departmental/faculty meeting	62
9	Collaborative online course	29

24. I prefer to learn how to use technology via...

#	Question	Strongly disagree	Disagree	Agree	Strongly agree	No opinion	Total Responses
2	One-on-one session	34	30	141	182	43	430
1	Face-to-face training session with a group	50	50	137	149	44	430
5	Online instructions	30	46	142	144	36	398
3	Collaborative effort with colleagues	31	40	142	132	60	405
7	"How to" video (e.g., YouTube video)	30	46	150	110	49	385
8	Self-paced online course	40	58	134	98	59	389
4	Webinar	53	65	117	89	54	378
9	Collaborative online course	60	90	89	39	87	365
6	Departmental/faculty meeting	88	81	109	36	68	382

25. I used this resource...

#	Question	Never	Once a semester	Once a month	Once a week	Not applicable	Total Responses
1	University staff (e.g., Help Desk, instructional designer/technologist, department support)	102	285	165	28	15	595
4	Colleague	148	197	122	23	30	520
6	Rutgers University website	222	136	74	18	36	486
5	Student	270	93	65	12	46	486
2	People outside of Rutgers	286	91	60	14	52	503
3	Faculty Development Center (e.g., CTAAR)	355	66	10	4	49	484
7	Other	38	5	7	9	17	76

26. I found this resource to be...

#	Question	Effective	Ineffective	No opinion	Total Responses
1	University staff (e.g., Help Desk, instructional designer/technologist, department support)	375	28	41	444
4	Colleague	256	10	55	321
6	Rutgers University website	130	33	105	268
5	Student	127	4	106	237
2	People outside of Rutgers	125	13	108	246
3	Faculty Development Center (e.g., CTAAR)	72	8	142	222
7	Other	17	2	37	56

27. How strongly do you agree with the following statements?Challenges that limit the use of instructional technology in my teaching are...

#	Question	Strongly Disagree	Disagree	Agree	Strongly agree	No opinion	Total Responses
10	Students use technology for non-class purposes while in class.	36	62	237	223	51	609
2	Need additional or better professional development	46	108	264	118	62	598
1	Too much time and effort to implement	56	163	247	109	39	614
5	Not enough support from my department	89	232	122	91	60	594
7	Use of instructional technology doesn't count toward promotion or tenure	81	109	112	86	198	586
18	Technology not reliable	70	193	182	72	66	583
6	Instructional technology would not improve teaching or learning in my courses	144	229	115	67	48	603
9	Technology in the classroom is distracting while I'm teaching	139	222	139	60	39	599
4	Not sure where to get help with	92	266	150	59	34	601

	technical problems						
3	I'm not familiar with the instructional technology that is available at the University	72	220	201	58	43	594
12	Students' low technology skills	153	274	84	23	52	586
11	Other:	0	5	9	21	19	54
8	I'm not comfortable using technology	258	254	52	16	16	596

28. How strongly do you agree with the following statements?

#	Question	Strongly disagree	Disagree	Agree	Strongly agree	No opinion	Total Responses
8	Instructional technology can improve student learning.	21	46	315	181	72	635
1	I have been given sufficient opportunities to participate in professional development/training related to instructional technology.	49	194	249	68	74	634

CLIMATE SUBCOMMITTEE

Appendix B
Student Survey Descriptive Statistics

Surveys completed

Last Modified: 02/03/2015
Filter By: Report Subgroup

1. In the 2013-2014 academic year, what year were you in?

#	Answer	Bar	Response	%
1	1st-year undergraduate student		247	17%
2	Other undergraduate student		787	53%
3	Graduate student		449	30%
4	Not a student at Rutgers University last year		0	0%
	Total		1,483	

2. In the 2013-2014 academic year, with which campus and school were you primarily affiliated?

Answer	Total Responses
Rutgers University-Newark ~ School of Criminal Justice	15
Rutgers University-New Brunswick ~ School of Communication & Info	43
Rutgers University-New Brunswick	137
Rutgers University-New Brunswick ~ School of Environmental & Biological Sci	104
Rutgers University-Camden ~ Rutgers Business School - Camden	20
Rutgers University-New Brunswick ~ School of Arts & Sciences	391
Rutgers University-Newark ~ Rutgers Business School - Newark/New Brunswick	71
Rutgers University-Camden ~ Camden College of Arts & Sciences	52
Rutgers University-New Brunswick ~ The Graduate School-New Brunswick	53
Rutgers University-New Brunswick ~ Rutgers Business School - Newark/New Brunswick	79
Rutgers University-New Brunswick ~ School of Engineering	85
Rutgers University-New Brunswick ~ Bloustein School of Planning	10
Rutgers University-Newark ~ School of Public Affairs & Admin	15
Rutgers University-Newark	52
Rutgers University-Newark ~ Newark College of Arts and Sciences	61
Rutgers University-New Brunswick ~ School of Social Work	36
Rutgers University-New Brunswick ~ School of Management & Labor Rel	17
Rutgers University-Camden ~ School of Nursing - Camden	21
Rutgers University-Camden ~ The Graduate School-Camden	15
Rutgers University-Camden	28
Rutgers University-Newark ~ Rutgers School of Law - Newark	17
Rutgers University-Camden ~ Rutgers School of Law - Camden	14
Rutgers University-Newark ~ The Graduate School-Newark	21
Rutgers Biomedical and Health Sciences ~ School of Public Health	1
Rutgers University-Newark ~ School of Social Work	7
Rutgers University-Camden ~ School of Social Work	10
Rutgers Biomedical and Health Sciences ~ Ernest Mario School of Pharmacy	16
Rutgers University-New Brunswick ~ School of Nursing - Rutgers University-New Brunswick & Rutgers University-Newark campus	7
Rutgers University-New Brunswick ~ Mason Gross School of the Arts	13
Rutgers University-New Brunswick ~ Graduate School of Education	22
Rutgers Biomedical and Health Sciences ~ School of Biomedical Sciences	2
Rutgers University-New Brunswick ~ Continuous Education	1
Rutgers Biomedical and Health Sciences ~ School of Nursing - Rutgers University-New Brunswick & Rutgers University-Newark campus	5
Rutgers University-New Brunswick ~ Grad School of Applied & Prof Psych	6
Total	1,447

Statistic	Campus	School or College
Most Common	Rutgers University-New Brunswick (69.38%)	School of Arts & Sciences (31.79%)
Total Responses	1,447	1,230

3. In the 2013-2014 academic year, were you any of the following? (check all that apply)

#	Answer	Bar	Response
1	Transfer student		204
2	Non-matriculated student (taking courses but not attempting to earn a degree)		46
3	Part-time student		227
4	None of the above		1,001

4. Which best describes your school-year residence in the 2013-2014 academic year?

	Answer	Bar	Response
1	Commuter		831
2	Residence Hall		469
3	Other		181
	Total		1,481

5. When you compare your learning experience in high school with your experience at Rutgers University in the 2013-2014 school year, did your high school use technology for more or less of the following?

#	Question	My high school did not use this	My high school used this, less than Rutgers	My high school used this, about the same as Rutgers	My high school used this, more than Rutgers	Not applicable	Total Responses
2	Utilize mobile devices during instruction (e.g., iPads, smartphones)	101	58	43	33	12	247
3	Utilize Smartboards	40	28	38	129	11	246
4	Post grades online	25	33	99	87	3	247
5	Post assignments online	56	99	75	14	3	247
7	Integrate student creation of videos	47	70	58	62	10	247
8	Integrate student creation of digital content (e.g., PowerPoint, Prezi, websites)	17	51	99	75	5	247
9	Integrate students working collaboratively on electronic documents (e.g., Google docs)	49	59	89	41	9	247
11	Utilize online textbooks/ebooks	131	60	33	17	6	247
13	Submit assignments online	67	107	62	7	3	246
19	Post course content online	76	103	52	12	3	246
20	Make electronic announcements	56	128	51	8	3	246

6. Did your high school offer online courses? (an online course is defined as having no more than three in person class meetings for the duration of the course)

#	Answer	Bar	Response
1	Yes		38
2	No		187
3	I'm not sure		22
	Total		247

7. How many online courses (no more than three in person class meetings for the duration of the course) did you take while you were in high school?

#	Answer	Bar	Response
1	None		181
2	1-3 online courses		23
3	More than 3 online courses		1
4	Not applicable		41
	Total		246

8. In the 2013-2014 academic year, what types of courses did you take at Rutgers University (select all that apply)

#	Answer	Bar	Response	
1	Face-to-face (traditional class where most meetings are held in person)		1,395	
2	Online (no more than three in person class meetings for the duration of the course)		303	
3	Hybrid (at least 1/3 of classes conducted online and remaining classes taught in person for the duration of the course)		209	

9. Drag and drop to rank the order of the format in which you prefer taking your courses, with 1 being your most preferred.

#	Answer	1	2	3	Total Responses
1	Face-to-face (traditional class where most meetings are held in person)	544	178	110	832
2	Online (no more than three in person class meetings for the duration of the course)	142	274	416	832
4	Hybrid (at least 1/3 of classes conducted online and remaining classes taught in person for the duration of the course)	146	380	306	832
	Total	832	832	832	-

10. During the 2013-2014 academic year, which of the following technologies did you have access to or available to take to a face-to-face class? (check all the apply)

#	Question	I had access to a...	I could take to class a...	Total Responses
1	Laptop	1,161	1,068	2,229
2	Tablet	557	658	1,215
3	Smartphone	1,097	951	2,048
4	Clicker	586	555	1,141

11. During the 2013-2014 academic year, did you use a Rutgers University Computing Center computer?

#	Answer	Bar	Response
2	Yes		1,099
4	No		332
5	Not sure		47
	Total		1,478

12. During the 2013-2014 academic year, did you have access to a laptop or desktop computer?

#	Answer	Bar	Response
2	Yes		1,450
4	No		14
5	Not applicable		13
	Total		1,477

13. In the 2013-2014 academic year, on average how often did you use a SMARTPHONE to do the following?

#	Question	Never	Once a semester	Once a month	Once a week or more	Not applicable	Total Responses	Mean
1	Access course materials or resources	207	83	274	710	34	1,308	3.87
2	Check my grades	201	142	291	646	29	1,309	3.99
3	Communicate with my instructors	399	197	351	329	30	1,306	4.47
4	Communicate with other students	98	46	157	993	17	1,311	3.45
5	Conduct research	580	127	198	333	72	1,310	4.66
6	Work on a class assignment	705	162	190	213	40	1,310	4.78
7	Work on group project	699	160	192	184	71	1,306	4.91
8	Take a quiz or exam	1,055	62	58	65	66	1,306	5.11
9	Submit a class assignment	845	144	135	139	47	1,310	4.94
10	Research and/or register for courses	647	332	162	128	36	1,305	5.04
11	Use learning management system (e.g., Blackboard, Canvas, eCollege/Pearson, Moodle, Sakai)	316	109	250	599	36	1,310	4.09
12	Read textbooks	796	112	152	203	47	1,310	4.80
13	Photograph information	296	110	314	549	37	1,306	4.12
14	Record my instructor	941	84	89	146	49	1,309	4.92

14. In the 2013-2014 academic year, on average how often did you use a
a TABLET to do the following?

#	Question	Never	Once a semester	Once a month	Once a week or more	Not applicable	Total Responses
1	Access course materials or resources	247	30	91	328	146	842
2	Check my grades	281	62	123	228	148	842
3	Communicate with my instructors	359	58	124	152	148	841
4	Communicate with other students	356	40	97	200	147	840
5	Conduct research	338	32	79	229	163	841
6	Work on a class assignment	339	41	89	216	156	841
7	Work on group project	397	44	75	147	175	838
8	Take a quiz or exam	530	26	31	81	173	841
9	Submit a class assignment	424	40	59	161	156	840
10	Research and/or register for courses	369	106	92	124	150	841
11	Use learning management system (e.g., Blackboard, Canvas, eCollege/Pearson, Moodle,Sakai)	287	35	104	264	150	840
12	Read textbooks	320	27	75	268	150	840
13	Photograph information	464	42	48	127	154	835
14	Record my instructor	582	13	17	63	163	838

15. In the 2013-2014 academic year, on average how often did you use a LAPTOP or your DESKTOP COMPUTER to do the following?

#	Question	Never	Once a semester	Once a month	Once a week or more	Not applicable	Total Responses
1	Access course content	13	12	46	1,367	16	1,454
2	Check my grades	23	126	192	1,100	17	1,458
3	Communicate with my instructors	32	74	365	977	12	1,460
4	Communicate with other students	73	70	181	1,123	12	1,459
5	Conduct research	67	44	110	1,186	51	1,458
6	Work on a class assignment	14	19	35	1,369	21	1,458
7	Work on group project	94	99	216	939	108	1,456
8	Take a quiz or exam	210	132	217	798	97	1,454
9	Submit a class assignment	15	19	90	1,312	23	1,459
10	Research and/or register for courses	20	356	196	870	14	1,456
11	Use learning management system (e.g., Blackboard, Canvas, eCollege/Pearson, Moodle,Sakai)	63	27	46	1,298	22	1,456
12	Read textbooks	300	81	185	825	61	1,452

16. In the 2013-2014 academic year, on average how often did you use a RUTGERS UNIVERSITY COMPUTING CENTER computer to do the following?

#	Question	Never	Once a semester	Once a month	Once a week or more	Not applicable	Total Responses
1	Access course content	196	143	291	444	14	1,088
2	Check my grades	374	159	250	283	21	1,087
3	Communicate with my instructors	411	172	252	235	21	1,091
4	Communicate with other students	455	142	229	245	18	1,089
5	Conduct research	308	146	259	333	45	1,091
6	Submit a class assignment	275	143	286	365	20	1,089
7	Work on group project	365	180	233	244	62	1,084
8	Take a quiz or exam	545	124	170	198	50	1,087
9	Work on class assignment	203	154	306	410	16	1,089
10	Research and/or register for courses	453	222	177	206	19	1,077
11	Print documents	69	85	204	724	7	1,089
12	Use learning management system (e.g., Blackboard, Canvas, eCollege/Pearson, Moodle,Sakai)	231	103	267	466	18	1,085
13	Read textbooks	567	110	171	203	35	1,086
14	Utilize specialized software	408	115	229	298	38	1,088

17. In the 2013-2014 academic year, which best describes how often you brought the following to class?

#	Question	Never	Less than half my classes	More than half my classes	Every class	Not applicable	Total Responses
1	Laptop	310	376	292	431	47	1,456
2	Tablet	547	181	119	168	423	1,438
3	Smartphone	72	20	55	1,205	101	1,453

18. During the 2013-2014 academic year, did you do any of the following for course or non-course use?

#	Question	I did this for a course...	I did this for non-course use...
1	Created electronic presentations (e.g., PowerPoint, Prezi)	1,057	409
3	Analyzed data with spreadsheets	787	500
4	Read blogs	485	751
5	Followed someone on Twitter	150	696
6	Utilized Facebook	478	1,100
7	Attended virtual sessions (e.g., Skype, Google Hangouts, Collaborate, Connect)	509	583
8	Collaborated on shared documents (e.g., Google docs)	996	575
10	Sent text messages	734	1,186
11	Sent instant messages/online chat	601	1,014
13	Read eBooks	882	604
14	Utilized electronic library resources	1,019	368
17	Created videos	253	404
18	Watched online videos	1,070	1,001
19	Created a podcast	84	247
20	Listened to podcasts	301	473
21	Posted to my own blog	193	385
22	Edited a wiki	139	263
23	Sent out Tweets	133	657
33	Collected data via an online survey	426	345
34	Uploaded videos to Internet	226	401

19. During the 2013-2014 academic year, which best describes how often you used either a laptop, tablet or smartphone to do the following during class time?

#	Question	Never	Less than half my classes	More than half my classes	Every class	Not applicable	Total Responses
1	Take notes	347	365	273	377	18	1,380
2	Respond to instructor's polling questions, Tweets, etc.	670	283	142	128	156	1,379
3	Research information related to course	236	361	385	378	17	1,377
4	Work on class projects/assignments	281	403	341	320	28	1,373
5	Check personal media (e.g., emails, Facebook, texts)	230	410	300	406	31	1,377
6	Review course materials (e.g., documents, websites)	167	321	411	462	14	1,375

20. During the 2013-2014 school year, how many of your Rutgers University classes used a learning management system (e.g., Blackboard, Sakai, eCollege, Moodle)

#	Answer	Bar	Response
1	None		27
2	Less than 25%		39
3	26% to 50%		58
4	51% to 75%		154
5	More than 75%		431
6	All		749
7	Not applicable		20
	Total		1,478

21. During the 2013-2014 academic year, which of the following learning management systems (LMS) were used for your Rutgers University courses? (check all the apply)

#	Answer	Bar	Response
1	Blackboard		474
2	Canvas		6
3	eCollege/Pearson		570
5	Sakai		1,142
6	Moodle		29
8	Other		50

22. Which LMS do you prefer?

#	Answer	Bar	Response
1	Blackboard		108
2	Canvas		1
3	eCollege/Pearson		107
4	Moodle		6
5	Sakai		416
6	Other		5
7	No preference		64
	Total		707

23. Would you like your instructors to use a learning management system?

#	Answer	Bar	Response
1	Yes		8
2	No		5
3	Undecided		14
	Total		27

24. My instructors used technology to do the following...

#	Question	Yes
1	Sent/received emails or announcements	1,298
3	Used discussion boards	838
4	Allowed assignments to be submitted through a learning management system (e.g., Blackboard, eCollege/Pearson, Sakai, Moodle)	1,214
5	Recorded grades online	1,290
6	Administered online exams	712
7	Conducted live class online sessions	338
8	Posted video or audio content related to course content	1,028
10	Created an online space for collaboration (e.g., wikis)	348
11	Utilized online textbooks/ebooks	749
12	Posted course materials online(e.g., documents, links to websites, syllabi)	1,396
22	Created an online course calendar	525
23	Held online office hours	353
24	Utilized social media (e.g., Twitter, Facebook)	237
25	Sent/received text messages	297
27	Allowed use of laptops, smartphones, or tablets	1,172
28	Recorded and posted online their lectures	610
29	Instant messaged/online chat	233
30	Used clickers	586

25. How much did your instructors use technology to do the following?

#	Question	Used too little	Used the appropriate amount	Used too much	Undecided	Total Responses
1	Sent/received emails or announcements	102	1,067	47	37	1,253
3	Used discussion boards	192	549	75	74	890
4	Allowed assignments to be submitted through a learning management system (e.g., Blackboard, eCollege/Pearson, Sakai, Moodle)	121	994	46	26	1,187
5	Recorded grades online	361	841	17	25	1,244
6	Administered online exams	171	478	40	96	785
7	Conducted live class online sessions	102	229	25	97	453
8	Posted video or audio content related to course content	200	767	29	60	1,056
10	Created an online space for collaboration (e.g., wikis)	122	240	19	90	471
11	Utilized online textbooks/ebooks	220	512	36	80	848
12	Posted course materials online(e.g., documents, links to websites, syllabi)	72	1,185	34	20	1,311
22	Created an online course calendar	210	329	9	66	614
23	Held online office hours	158	231	14	81	484
24	Utilized social media (e.g., Twitter, Facebook)	116	163	20	93	392
25	Sent/received text messages	97	186	10	149	442
27	Allowed use of laptops, smartphones, or tablets	149	906	58	48	1,161
28	Recorded and posted online their lectures	251	376	16	61	704
29	Instant messaged/online chat	112	159	9	102	382
30	Used clickers	97	384	119	89	689

26. In the 2013-2014 academic year, which resources did you use when you needed help using technology for your course work? (check all that apply)

#	Answer	Bar	Response
1	Rutgers University Help Desk		311
2	Other students		737
3	Instructors		474
4	Other:		52
5	Rutgers University Computing Services lab assistant		309
9	I did not seek assistance		505

27. How strongly do you agree with the following statements?

#	Question	Strongly Disagree	Disagree	Agree	Strongly Agree	Undecided	Total Responses
1	A learning management system (e.g., Blackboard, Sakai, eCollege) enhances my learning.	34	86	666	582	94	1,462
2	Mobile devices in class enhance my learning.	155	409	391	298	201	1,454
3	My Rutgers instructors utilize technology effectively.	66	253	774	274	87	1,454
4	It is useful to have my assignment grades posted online throughout the semester.	20	13	314	1,081	34	1,462
5	A learning management system helps to keep me organized.	25	90	534	726	83	1,458
6	My learning would be improved if my Rutgers instructors utilized technology more effectively.	52	186	539	518	160	1,455
7	Technology helps me to communicate with my instructors.	26	42	608	748	36	1,460
8	Technology helps me to communicate with my classmates.	34	107	526	733	59	1,459
9	Use of mobile devices in class is a distraction for me.	136	365	504	301	142	1,448
10	I know who to contact at Rutgers University for technical support for instructional technology.	154	358	584	269	92	1,457
11	The technical support I received from Rutgers University for instructional technology is effective.	74	162	471	201	536	1,444

ORGANIZATION SUBCOMMITTEE

Appendix C
Instructional Technology Units at Rutgers

Unit	Acronym Used in Report
Academic & Informational Technologies & Services	AITS
Academic Affairs Instructional Technology (Rutgers School of Dental Medicine)	RSDM AA
Academic Technology Services	ATS
Arts, Culture, Media	ACM
Biological Sciences - Newark	BIOS-N
Center for Molecular and Behavioral Neuroscience	CMBN
Center for Online & Hybrid Learning and Instructional Technology	COHLIT
Center for Teaching Advancement and Assessment Research	CTAAR
Department of Electrical & Computer Engineering	ECE
Department of Mathematics – New Brunswick	M-NB
Department of Mechanical and Aerospace Engineering	MAE
Department of Physics and Astronomy	PHY
Digital Classroom Services	DCS
Division of Continuing Studies	DoCS
Division of Life Sciences	DLS
Edward J. Bloustein School of Planning and Public Policy	BSP
Engineering Computing Services	ECS
Graduate School of Applied and Professional Psychology	GSAPP
Graduate School of Education - Office of Information Technology	GSE-OIT
Instructional Design & Technology - Camden	IDT
Instructional Design and Technology Services (School of Comm. & Info)	IDTS
Instructional Technology & eLearning Solutions	ITeS
John Cotton Dana Library	DANA
Laboratory for Computer Science Research	LCSR
Mason Gross	MG
New Jersey Child Support Institute	NJCSI
Newark Computing Services	NCS
Newark Faculty of Arts and Science - Office of the Dean, IT	FASN
NJMS Technology Support Services	IT@NJMS
Office of Computing and Technology Support	OCT
Office of Disability Services	ODS
Office of Information Technology	OIT
Office of Information Technology – Camden Computing Services	OIT-CCS
Office of Instructional and Research Technology	OIRT
Office of Technology & Instructional Services (Rutgers Business School)	OTIS
Paul Robeson Library	PRL
Rutgers – Camden Learning Center	RCLC
Rutgers Camden Information Technology	RCIT

Rutgers Learning Centers	RLC
Rutgers School of Law, Computer Services	RSLN CS
Rutgers University Libraries	RUL
School of Arts and Sciences Information Technology Office	SAS-IT
School of Environmental and Biological Sciences - Academic Programs/Program in Science Learning	SEBS
School of Health Related Professions - Office of Technology and Facilities Management	SHRP-OTFM
School of Management and Labor Relations	SMLR
Technology and Learning Spaces	TLS

ORGANIZATION SUBCOMMITTEE

Appendix D
Instructional Technology Units Level of Coverage (Campus and Rutgers-wide)

<table>
<tr><th></th><th>Camden</th><th>Newark</th><th>New Brunswick</th><th>Biomedical & Health Sciences</th></tr>
<tr><td>Rutgers-wide</td><td colspan="4">Center for Teaching Advancement & Assessment Research
Rutgers University Libraries
Office of Instructional and Research Technology
Office of Information Technology
Office of Disability Services
Center for Online & Hybrid Learning and Instructional Technology</td></tr>
<tr><td rowspan="2">Cross-Campus</td><td colspan="3">Division of Continuing Studies</td><td></td></tr>
<tr><td colspan="2"></td><td colspan="2">Rutgers Learning Centers</td></tr>
<tr><td>Campus/RBHS-wide</td><td>Instructional Design & Technology, Camden+

OIT-Camden Computing Services

Paul Robeson Library

Rutgers Camden Information Technology

Rutgers – Camden Learning Center</td><td>Academic Technology Services

John Cotton Dana Library

Newark Computing Services

Technology and Learning Spaces</td><td>Digital Classroom Services</td><td>Instructional Technology & eLearning Solutions</td></tr>
</table>

italics = sub-department of a parent department that is also listed
+does not support Law School

ORGANIZATION SUBCOMMITTEE

Appendix E
Instructional Technology Units Level of Coverage
(School/Department Specific)

	Camden	Newark	New Brunswick	Biomedical & Health Sciences
School/Department-Specific		Office of Technology & Instructional Services (Rutgers Business School) Office of Computing & Technology Support, School of Public Health*		
		Arts, Culture, Media Biological Sciences - Newark Center for Molecular & Behavioral Neuroscience Newark Faculty of Arts and Science Office of the Dean, IT Rutgers School of Law - Newark, Computer Services	Bloustein School Electrical & Computer Engineering *Mathematics* *Physics & Astronomy* *Division of Life Sciences* Engineering Computer Services Graduate School of Applied and Professional Psychology GSE Office of Information Technology Instructional Design and Technology (SCI) *Laboratory for Computer Science Research* Mason Gross Mechanical & Aerospace Engineering New Jersey Child Support Institute SAS-IT SEBS Academic Programs/Program in Science Learning SMLR	Academic & Informational Technologies & Services, School of Nursing Academic Affairs Instructional Technology, RSDM NJMS Technology Support Services SHRP Office of Technology and Facilities Management

** also supporting Stratford location*

ORGANIZATION SUBCOMMITTEE

Appendix F
Services Provided

	Accessibility Support	Application Development	Assessment	Blackboard Support	Classroom A/V Support	Classroom Equipment Installation	Computer Hardware/Software Purchasing	Desktop Support	Digital Conversion	ePearson Support	Equipment Loan	Event Support	Instructional Computer Lab Support	Internet Support	Instructional Design	Laptop Support	Lecture Recording	Moodle Support	Network Support	Non-classroom A/V Support	Online/Hybrid Learning Tools	Pedagogic Training	Sakai Support	Software Creation	Tablet/Phone Support	Video Recording	Video/Web Conferencing	Web Development	Other
ACM	✓				✓	✓	✓	✓	✓		✓	✓	✓	✓		✓				✓						✓		✓	✓
AITS	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ATS	✓			✓	✓	✓		✓	✓		✓	✓			✓	✓	✓					✓				✓	✓		
BIOS-N					✓	✓	✓	✓	✓							✓				✓								✓	
BSP	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	
CMBN					✓								✓					✓		✓	✓								
COHLIT	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CS-LN	✓				✓	✓	✓	✓	✓		✓	✓		✓		✓	✓		✓	✓					✓	✓	✓	✓	
CTAAR			✓																		✓	✓	✓						✓
DANA			✓	✓					✓		✓	✓	✓		✓		✓			✓	✓						✓		✓
DCS	✓				✓	✓	✓				✓	✓		✓	✓	✓	✓		✓	✓	✓	✓			✓	✓	✓		✓
DoCS	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓			✓	✓	✓	✓	
DLS					✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓				✓	✓	✓	✓		
ECE		✓	✓		✓	✓	✓	✓			✓	✓	✓	✓		✓			✓	✓			✓		✓		✓	✓	✓
ECS		✓	✓		✓	✓	✓	✓				✓	✓		✓				✓									✓	✓
FASN								✓																				✓	
GSAPP		✓	✓		✓	✓	✓	✓	✓		✓	✓		✓		✓	✓			✓			✓		✓	✓	✓	✓	
GSE-OIT		✓			✓	✓	✓	✓			✓	✓	✓	✓		✓			✓	✓							✓		
IDT	✓		✓				✓		✓	✓					✓						✓	✓	✓		✓				✓
IDTS	✓		✓		✓		✓			✓	✓				✓		✓			✓	✓	✓	✓			✓	✓		
IT@NJMS	✓	✓			✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	
ITeS	✓	✓	✓				✓		✓						✓		✓	✓		✓	✓	✓					✓		
LCSR					✓		✓	✓				✓	✓	✓	✓	✓	✓		✓		✓		✓	✓	✓	✓	✓	✓	
M-NB	✓				✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓	✓		✓	✓	✓		✓	✓	
MAE						✓	✓	✓																					
MG			✓		✓		✓	✓	✓	✓	✓	✓	✓	✓		✓			✓	✓			✓		✓		✓	✓	
NCS		✓		✓	✓	✓	✓	✓					✓	✓		✓												✓	
NJCSI	✓	✓	✓		✓		✓		✓		✓	✓	✓		✓		✓			✓	✓					✓	✓		✓
OCT					✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	
ODS	✓																												
OIRT	✓	✓	✓	✓		✓	✓			✓				✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
OIT	✓				✓	✓	✓	✓			✓	✓				✓				✓					✓		✓		

	Accessibility Support	Application Development	Assessment	Blackboard Support	Classroom A/V Support	Classroom Equipment Installation	Computer Hardware/Software Purchasing	Desktop Support	Digital Conversion	ePearson Support	Equipment Loan	Event Support	Instructional Computer Lab Support	Internet Support	Instructional Design	Laptop Support	Lecture Recording	Moodle Support	Network Support	Non-classroom A/V Support	Online/Hybrid Learning Tools	Pedagogic Training	Sakai Support	Software Creation	Tablet/Phone Support	Video Recording	Video/Web Conferencing	Web Development	Other
OIT-CCS	✓				✓	✓	✓	✓			✓	✓	✓	✓		✓	✓		✓	✓		✓		✓		✓	✓		
OTIS	✓		✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓			✓	✓	✓		
PHY	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓		✓			✓				✓			✓
PRL	✓	✓			✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓			✓				✓	✓	✓	✓	✓	✓	✓
RCIT	✓	✓			✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓		✓	✓	✓		✓	✓	✓	✓	✓	✓	
RLC	✓		✓									✓										✓				✓			
RCLC																		✓											
RSDM AA		✓			✓	✓	✓				✓				✓		✓	✓		✓	✓	✓				✓	✓	✓	
RSLN CS	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓		✓		✓	✓								✓	✓	✓	✓	✓
RUL	✓	✓					✓	✓			✓	✓	✓	✓		✓			✓	✓	✓			✓	✓		✓	✓	
SAS-IT	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓	✓		✓	✓	✓		✓	✓	✓
SEBS		✓	✓		✓		✓			✓	✓				✓	✓	✓			✓	✓	✓	✓			✓	✓		
SHRP-OTFM	✓				✓		✓	✓			✓	✓		✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓
SMLR	✓				✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓		✓		✓		✓			✓	✓		
TLS			✓	✓	✓	✓	✓	✓			✓	✓			✓	✓	✓				✓	✓				✓	✓		

PEDAGOGY SUBCOMMITTEE

Appendix G
Faculty Survey Descriptive Statistics

1. With which campus and school are you primarily affiliated?

Answer	Total Responses
Rutgers University-New Brunswick ~ School of Arts & Sciences	162
Rutgers Biomedical and Health Sciences ~ School of Health Related Professions	37
Rutgers University-Camden ~ Rutgers School of Law - Camden	12
Rutgers Biomedical and Health Sciences ~ Robert Wood Johnson Medical School	53
Rutgers University-Camden ~ Camden College of Arts & Sciences	44
Rutgers University-New Brunswick ~ Rutgers Business School - Newark/New Brunswick	13
Rutgers Biomedical and Health Sciences ~ New Jersey Medical School	39
Rutgers University-New Brunswick ~ Graduate School of Education	27
Rutgers Biomedical and Health Sciences ~ School of Public Health	12
Rutgers University-Newark ~ Newark College of Arts and Sciences	36
Rutgers University-Newark ~ Rutgers Business School - Newark/New Brunswick	15
Rutgers University-New Brunswick ~ School of Communication & Info	22
Rutgers University-New Brunswick ~ Bloustein School of Planning	12
Rutgers University-Camden ~ School of Nursing - Camden	7
Rutgers University-New Brunswick ~ School of Environmental & Biological Sci	40
Rutgers University-New Brunswick ~ School of Engineering	26
Rutgers University-New Brunswick ~ Mason Gross School of the Arts	10
Rutgers University-New Brunswick ~ Continuous Education	1
Rutgers Biomedical and Health Sciences ~ Rutgers School of Dental Medicine	16
Rutgers University-Camden ~ The Graduate School-Camden	3
Rutgers University-Camden ~ Rutgers Business School - Camden	12
Rutgers Biomedical and Health Sciences ~ Ernest Mario School of Pharmacy	5
Rutgers University-New Brunswick ~ The Graduate School-New Brunswick	10

Rutgers University-New Brunswick ~ Grad School of Applied & Prof Psych	2
Rutgers University-New Brunswick ~ School of Management & Labor Rel	12
Rutgers Biomedical and Health Sciences ~ School of Nursing - Rutgers University-New Brunswick & Rutgers University-Newark campus	8
Rutgers University-Newark ~ Rutgers School of Law - Newark	2
Rutgers University-New Brunswick ~ School of Social Work	8
Rutgers University-Newark ~ School of Public Affairs & Admin	6
Rutgers University-Newark ~ The Graduate School-Newark	7
Rutgers University-Newark ~ School of Social Work	2
Rutgers University-Newark ~ School of Criminal Justice	4
Rutgers University-Camden ~ School of Social Work	1
Rutgers Biomedical and Health Sciences ~ School of Biomedical Sciences	2
Rutgers University-Newark ~ Rutgers/NJIT Exchange	1
Total	669

Statistic	Campus	School or College
Most Common	Rutgers University-New Brunswick (51.57%)	School of Arts & Sciences (24.22%)
Total Responses	669	669

2. How long have you been teaching in higher education?

#	Answer		Response	%
1	This is my first year		22	3%
2	Less than five years		113	17%
3	6-10 years		102	15%
4	More than 10 years		432	65%
	Total		669	100%

Statistic	Value
Min Value	1
Max Value	4
Mean	3.41
Variance	0.78
Standard Deviation	0.88
Total Responses	669

3. How long have you been teaching at Rutgers University/UMDNJ?

#	Answer		Response	%
1	This is my first year teaching at Rutgers/UMDNJ		46	7%
2	Less than 5 years		172	26%
3	6-10 years		102	15%
4	More than 10 years		349	52%
	Total		669	100%

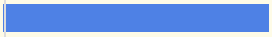
Statistic	Value
Min Value	1
Max Value	4
Mean	3.13
Variance	1.04
Standard Deviation	1.02
Total Responses	669

4. Which best describes your teaching role at Rutgers?

#	Answer		Response	%
1	Full time faculty/administrator		529	79%
2	Part time lecturer/adjunct		140	21%
	Total		669	100%

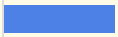
Statistic	Value
Min Value	1
Max Value	2
Mean	1.21
Variance	0.17
Standard Deviation	0.41
Total Responses	669

5. I teach (check all that apply)

#	Answer		Response	%
1	Undergraduate students		482	72%
2	Graduate students		496	74%
3	Non-matriculated students		134	20%

Statistic	Value
Min Value	1
Max Value	3
Total Responses	669

6. I teach (check all that apply)

#	Answer		Response	%
1	Arts & humanities		126	19%
2	Social sciences		136	20%
3	Science, technology, engineering, mathematics (STEM)		204	30%
4	Health professions		204	30%
5	Professional schools (e.g., law, business, professional psychology, social work, education)		156	23%

Statistic	Value
Min Value	1
Max Value	5
Total Responses	669

7. Indicate the extent to which you agree or disagree with the following statements describing different teaching philosophies

#	Question	Strongly disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Total Responses	Mean
1	I see my role as a facilitator. I try to provide opportunities and resources for my students to discover or construct concepts for themselves.	10	28	70	286	250	644	4.15
2	I see my role as a subject expert where students learn best when I teach through explanation, show students how to do the work, and assign specific projects.	5	28	75	293	243	644	4.15
3	The most important part of instruction is that it encourages students to think deeply and make sense of material.	5	2	30	199	408	644	4.56
4	Students	60	231	157	133	63	644	2.86

	can often learn basic skills in the context of mastering complex content—learning basic skills is not a prerequisite for mastering complex content.							
5	I see my role as providing an environment for my students where they can learn from one another through collaborative projects, class discussions, and other forms of interaction with others.	10	30	108	279	217	644	4.03
6	An important part of instruction is that it provides an environment where my students feel encouraged and comfortable to question me and challenge the material and ideas.	6	4	26	221	387	644	4.52
7	An important	8	15	68	286	267	644	4.23

	part of instruction is that it provides opportunities for students to learn through explicit presentation of content in a variety of ways (e.g. lecture, media, readings).							

Statistic	I see my role as a facilitator. I try to provide opportunities and resources for my students to discover or construct concepts for themselves.	I see my role as a subject expert where students learn best when I teach through explanation, show students how to do the work, and assign specific projects.	The most important part of instruction is that it encourages students to think deeply and make sense of material.	Students can often learn basic skills in the context of mastering complex content—learning basic skills is not a prerequisite for mastering complex content.	I see my role as providing an environment for my students where they can learn from one another through collaborative projects, class discussions, and other forms of interaction with others.	An important part of instruction is that it provides an environment where my students feel encouraged and comfortable to question me and challenge the material and ideas.	An important part of instruction is that it provides opportunities for students to learn through explicit presentation of content in a variety of ways (e.g. lecture, media, readings).
Min Value	1	1	1	1	1	1	1
Max Value	5	5	5	5	5	5	5
Mean	4.15	4.15	4.56	2.86	4.03	4.52	4.23
Variance	0.79	0.72	0.45	1.31	0.83	0.48	0.68
Standard Deviation	0.89	0.85	0.67	1.14	0.91	0.69	0.82
Total Responses	644	644	644	644	644	644	644

8. Do you use instructional technology (e.g., classroom response systems, Wikis, threaded discussion, online assessments, synchronous web conferences, interactive games) in your courses?

#	Answer		Response	%
1	Yes		378	59%
2	No		266	41%
	Total		644	100%

Statistic	Value
Min Value	1
Max Value	2
Mean	1.41
Variance	0.24
Standard Deviation	0.49
Total Responses	644

9. The following questions pertain to the use of instructional technology in your courses:

#	Question	Strongly disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Total Responses	Mean
1	I utilize technology in my courses to better convey information and present material.	3	5	38	156	168	370	4.30
2	I utilize technology in my courses to enhance classroom community.	4	46	99	118	103	370	3.73
3	I utilize technology in my courses to enhance student learning.	1	6	30	148	185	370	4.38
4	I utilize technology in my courses to engage students.	2	15	53	129	171	370	4.22

Statistic	I utilize technology in my courses to better convey information and present material.	I utilize technology in my courses to enhance classroom community.	I utilize technology in my courses to enhance student learning.	I utilize technology in my courses to engage students.
Min Value	1	1	1	1
Max Value	5	5	5	5
Mean	4.30	3.73	4.38	4.22
Variance	0.60	1.07	0.53	0.77
Standard Deviation	0.77	1.03	0.73	0.88
Total Responses	370	370	370	370

10. The following questions pertain to the use of instructional technology in your courses:

#	Question	Strongly disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Total Responses	Mean
1	I utilize technology in my courses because I enjoy experimenting with new teaching methods.	4	37	88	152	83	364	3.75
2	I utilize technology because it helps me with course management and organization.	2	17	57	160	128	364	4.09
3	I utilize technology because it improves my standing within my department.	77	113	126	36	12	364	2.43
4	I utilize technology in my courses because I am encouraged by administrators (deans, chairs, directors, etc) to do so.	64	110	122	54	14	364	2.57
5	I utilize technology in my courses because students enjoy it and/or expect it.	13	25	74	187	65	364	3.73
6	I utilize	62	99	142	53	8	364	2.58

	technology in my courses because many of my colleagues do so.							
7	I have received professional development that has caused me to think about how technology could enhance the teaching approaches I use in my classroom.	44	81	72	117	50	364	3.13

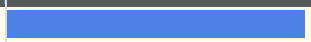
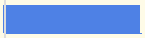
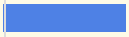
Statistic	I utilize technology in my courses because I enjoy experimenting with new teaching methods.	I utilize technology because it helps me with course management and organization.	I utilize technology because it improves my standing within my department.	I utilize technology in my courses because I am encouraged by administrators (deans, chairs, directors, etc) to do so.	I utilize technology in my courses because students enjoy it and/or expect it.	I utilize technology in my courses because many of my colleagues do so.	I have received professional development that has caused me to think about how technology could enhance the teaching approaches I use in my classroom.
Min Value	1	1	1	1	1	1	1
Max Value	5	5	5	5	5	5	5
Mean	3.75	4.09	2.43	2.57	3.73	2.58	3.13
Variance	0.92	0.74	1.07	1.13	0.91	1.01	1.56
Standard Deviation	0.96	0.86	1.03	1.06	0.95	1.01	1.25
Total Responses	364	364	364	364	364	364	364

11. Rutgers provides faculty with instructional design support. An instructional designer is an expert in incorporating technology and pedagogy to enhance classroom-based or online course design. Have you ever sought assistance from an instructional designer?

#	Answer		Response	%
1	Yes		146	23%
2	No		480	77%
	Total		626	100%

Statistic	Value
Min Value	1
Max Value	2
Mean	1.77
Variance	0.18
Standard Deviation	0.42
Total Responses	626

12. I have used an instructional designer (check all that apply)

#	Answer		Response	%
1	For tech support		126	88%
2	To enhance the delivery of my content		91	63%
3	To improve aesthetics		26	18%
4	To assist with assessment development		35	24%
5	To increase active learning		57	40%
6	To improve my teaching		57	40%
7	To maximize student learning outcomes		51	35%
8	To ensure my course meets ADA accessibility requirements		21	15%
9	To design my course to the Quality Matters standards for online courses		23	16%
10	To ensure effective use of instructional and other technologies within my courses		81	56%
11	To fulfill accreditation requirements (e.g., adding learning/course goals)		12	8%
12	Because I received a request/requirement to seek out their services		11	8%

Statistic	Value
Min Value	1
Max Value	12
Total Responses	144

13. Please indicate the extent to which you agree with the following statements regarding instructional technology in classroom-based instruction.

#	Question	Strongly disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Total Responses	Mean
1	My department/institution rewards faculty for using instructional technology	107	177	299	35	5	623	2.44
2	My department/institution values faculty who use instructional technology	64	71	294	163	31	623	3.04
3	There should be incentives for faculty to use technology in classroom instruction	42	98	246	165	72	623	3.20
4	I am intimidated by instructional technology	245	185	117	71	5	623	2.05
5	I am aware of opportunities at Rutgers to receive training in using technology to enhance instruction	45	131	123	261	63	623	3.27
6	I have had many opportunities to see how instructional technology is being used	81	199	160	154	29	623	2.76
7	The time it takes for me to learn how to use instructional technology is better spent on other aspects of my work	78	204	201	105	35	623	2.70

Statistic	My department /institution rewards faculty for using instructional technology	My department /institution values faculty who use instructional technology	There should be incentives for faculty to use technology in classroom instruction	I am intimidated by instructional technology	I am aware of opportunities at Rutgers to receive training in using technology to enhance instruction	I have had many opportunities to see how instructional technology is being used	The time it takes for me to learn how to use instructional technology is better spent on other aspects of my work
Min Value	1	1	1	1	1	1	1
Max Value	5	5	5	5	5	5	5
Mean	2.44	3.04	3.20	2.05	3.27	2.76	2.70
Variance	0.75	0.99	1.11	1.11	1.25	1.22	1.14
Standard Deviation	0.87	0.99	1.06	1.05	1.12	1.10	1.07
Total Responses	623	623	623	623	623	623	623

14. Please indicate the number of online courses you have taught (at any institution):

#	Answer	Min Value	Max Value	Average Value	Standard Deviation
1	Fully online (i.e., no more than three in person class meetings for the duration of the course)	0.00	100.00	1.50	6.53
2	Hybrid (i.e., at least 1/3 of classes conducted online, remainder taught in person for the duration of the course)	0.00	50.00	0.84	3.72

15. Please indicate the extent to which you agree with the following statements regarding online/hybrid courses:

#	Question	Strongly disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Total Responses	Mean
1	Online courses provide students with more flexible learning opportunities	17	41	180	285	93	616	3.64
2	Offering online courses is viewed favorably by my department	43	106	290	143	34	616	3.03
3	I am aware of opportunities at Rutgers to receive training in developing and delivering an online course	44	147	121	246	58	616	3.21
4	I have the skills needed to teach online courses	40	121	159	204	92	616	3.30
5	I am knowledgeable about developing instructional materials for online courses	65	199	149	141	62	616	2.90
6	The quality of teaching and learning in online courses can be at least as good as face-to-face classroom instruction	104	172	156	119	65	616	2.79
7	Faculty are recognized and/or	89	148	325	49	5	616	2.57

	rewarded for teaching online courses							
8	Teaching online courses takes more time than traditional face-to-face courses	14	51	278	161	112	616	3.50
9	The time it would take to develop an online course would be better spent on other aspects of my work	48	117	243	139	69	616	3.10
10	The advantages of online courses far outweigh the disadvantages	96	149	255	69	47	616	2.71
11	Teaching online courses is compatible with my teaching style	92	142	190	145	47	616	2.86

Statistic	Online courses provide students with more flexible learning opportunities	Offering online courses is viewed favorably by my department	I am aware of opportunities at Rutgers to receive training in developing and delivering an online course	I have the skills needed to teach online courses	I am knowledgeable about developing instructional materials for online courses	The quality of teaching and learning in online courses can be at least as good as face-to-face classroom instruction
Min Value	1	1	1	1	1	1
Max Value	5	5	5	5	5	5
Mean	3.64	3.03	3.21	3.30	2.90	2.79
Variance	0.83	0.90	1.26	1.29	1.37	1.53
Standard Deviation	0.91	0.95	1.12	1.14	1.17	1.24
Total Responses	616	616	616	616	616	616

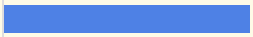
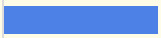
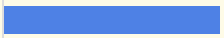
Statistic	Faculty are recognized and/or rewarded for teaching online courses	Teaching online courses takes more time than traditional face-to-face courses	The time it would take to develop an online course would be better spent on other aspects of my work	The advantages of online courses far outweigh the disadvantages	Teaching online courses is compatible with my teaching style
Min Value	1	1	1	1	1
Max Value	5	5	5	5	5
Mean	2.57	3.50	3.10	2.71	2.86
Variance	0.74	0.92	1.17	1.20	1.35
Standard Deviation	0.86	0.96	1.08	1.10	1.16
Total Responses	616	616	616	616	616

16. How interested are you in learning how technologies can be used to enhance student learning?

#	Answer		Response	%
1	Not interested		26	4%
2	A little interested		90	15%
3	Moderately interested		141	23%
4	Interested		191	31%
5	Very interested		165	27%
	Total		613	100%

Statistic	Value
Min Value	1
Max Value	5
Mean	3.62
Variance	1.32
Standard Deviation	1.15
Total Responses	613

17. Please select the professional development topics that would be of interest to you (check all that apply)

#	Answer		Response	%
1	Use of technologies (e.g., clickers, videos, Wikis, virtual worlds, social media) to enhance student learning		408	67%
2	Selecting appropriate online teaching and learning methods		343	56%
3	Selecting and designing methods for a flipped classroom		256	42%
4	Adapting course material to an online or hybrid environment		302	49%
5	Use of technology to assess student progress		359	59%
6	How to effectively facilitate an online discussion		307	50%
7	Other		73	12%

Statistic	Value
Min Value	1
Max Value	7
Total Responses	613

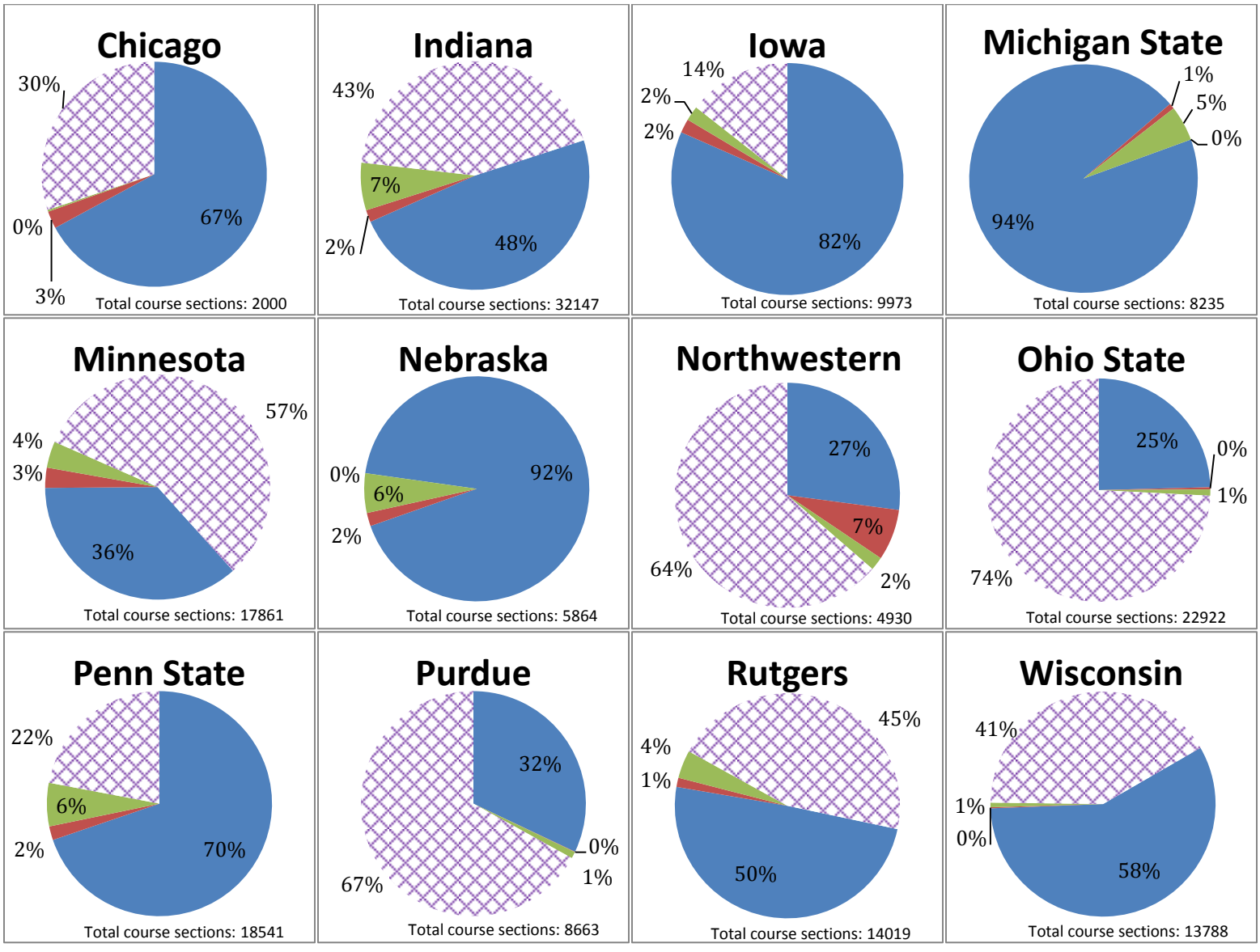
PEERS & ASPIRANTS SUBCOMMITTEE

Appendix H
CIC Course Sections Survey on LMS Usage

Course Sections Survey Results
February 2014

LMS Utilizing Course Sections Categorized by Type

The following graphs display the percentages of face to face (F2F), hybrid, and online course sections that utilize one or more Learning Management Systems (LMS) based on the total number of course sections taught at each university during Spring 2013. Note: Michigan State University's data is Spring 2014. Also, Indiana University's data is from Fall 2013.



Course Sections Categorized by LMS

University	LMS	Number of Courses	Percentage of Total Courses
University of Chicago	Blackboard	1392	69.60%
	Piazza	5	0.25%
	Non LMS	603	30.15%
	Total	**2000**	
Indiana University	Angel	168	0.52%
	Sakai	18094	56.29%
	Non LMS	13885	43.19%
	Total	**32147**	
University of Iowa	Desire2Learn	8536	85.59%
	Non LMS	1437	14.41%
	Total	**9973**	
University of Minnesota	Moodle	7725	43.25%
	Non LMS	10136	56.75%
	Total	**17861**	
Northwestern University	Blackboard	1782	36.15%
	LoudCloud	1	0.02%
	Moodle	10	0.20%
	Non LMS	3137	63.63%
	Total	**4930**	
Ohio State University	Desire2Learn	5913	25.80%
	Non LMS	17009	74.20%
	Total	**22922**	
Pennsylvania State University	Angel	14458	77.98%
	Non LMS	4083	22.02%
	Total	**18541**	
Purdue University	Blackboard	2832	32.69%
	Chips/Lon-Capa	31	0.36%
	Non LMS	5800	66.95%
	Total	**8663**	
Rutgers University	Blackboard	1415	10.09%
	Moodle	932	6.65%
	Pearson e-College	722	5.15%
	Sakai	4600	32.81%
	Non LMS	6350	45.30%
	Total	**14019**	
University of Wisconsin-Madison	Canvas	7	0.05%
	Desire2Learn	7014	50.87%
	Moodle	1050	7.62%
	Non LMS	5717	41.46%
	Total	**13788**	

PEERS & ASPIRANTS SUBCOMMITTEE

Appendix I
CIC Instructional Technology Spreadsheet

School	LMS	Lecture Capture	Web Conferencing	Wiki	Clickers	Digital Media	Video Conferencing	Office365 Y/N	Lynda.com Y/N	Content Mgmt.	MOOCs	e-Text	Fac. Evals.	Plagiarism Detection	Communications	Blogs	Other services/projects
Illinois	Blackboard (Central IT); Moodle (Major College); LON-CAPA (departmental)	Echo 360	Blackboard Collaborate	Confluence	i>Clicker	Kaltura Ensemble			YES	Drupal	Coursera	e-Text @ Illinois		SafeAssign via Blackboard	Wordpress		
Indiana	Canvas	Echo 360	Adobe Connect (and Zoom Experimentation)	Confluence	Turning Technologies	Pilot Kaltura And Ensemble	h.323 and Zoom evaluation	Yes, For students currently	Yes (Renewal Pending)	Cascade Server	Canvas/Google	Major Publishers and Courseload	eXplorance BLUE (Bloomington campus; IUPUI pilot)	Turnitin	Lync, Redbooth (small pilot), Yammer (evaluation), ListServ, LMS		Evaluations and Pilots: VoiceThread, Piazza, Tableau, MSBI, Qualtrics, Avalon
Iowa	Desire2Learn	Panopto	Blackboard Collaborate Zoom	Confluence	Turning Technologies	ShareStream Flash Streaming iTunes YouTube	Polycom LifeSize	Yes, For students currently	Yes	Drupal	Drupal Homegrown for one dept. only	Pearson MacGraw-Hill MacMillan As Requested	CollegeNet	Turnitin	Lync		
Maryland	Canvas	Panopto	Adobe Connect	Media Wiki/Confluence /Campus Pack	Turning Technologies	ShareStream (for video Reserves) Under RFP for campus resource	PolyComm, Cisco,	n	y	Drupal	Coursera	not specific	Just moved to eXplorance Blue		Wordpress with Edublogs and Campus Pack		
Michigan	Sakai; piloting Canvas via Unizin	MediaSite, Home Grown, Camtasia	Adobe Connect (in some units)	MediaWiki	iClickers	Kaltura	BlueJeans, Google	N, Google Apps	Negotiating	Drupal, Zoho	Coursera, NovoEd	None; accessibility concerns	Home grown, built on top of Sakai LMS	None	Yammer, Google Chat & Plus		
Michigan State	ANGEL until 5/15/15; D2L, CourseWeaver	MediaSite in Med School; Echo 360 in Education & Vet Med	Adobe; Zoom	Google Sites	iClicker	Kaltura, Real Networks & Home Built	Polycom; Zoom	N	No; Using SkillPort	D2L, Drupal & Fedora	D2L, Moodle, Canvas	Nothing at this time	Home grown	Turnitin	Epigeum		Epigeium
Minnesota	Moodle 2.6 for AY14	Camtasia Relay	Adobe Connect (RFP for replacement is done and a decision is imminent, likely WebEx)	TWiki	iClicker/Turning Point (central IT only supports the Moodle plugins for these vendors)	Media Mill (homegrown conversion/sharing web app, being phased out), MediaHub (homegrown media conversion app), MediaEngine (homegrown media conversion platform), Kaltura (mostly in Moodle), YouTube, iTunes U	Tandberg/Cisco Video Endpoint	No	Yes	Drupal (replacing Oracle Content Management), Google Sites, ServiceNow	Coursera	VitalSource/CourseSmart McGraw Hill	eXplorance BLUE	Turnitin			
Nebraska	Blackboard	Camtasia Relay and currently piloting Echo 360	Adobe Connect	Learning Objets	iClicker	ITunes U, Youtube, Heliz Media Server	Polycom	Yes	Yes	Drupal	Bb CourseSites	Pearson (minimal use)	Homegrown	SafeAssign	Lync, Yammer		Bb Analytics, Digital Measures' Activity Insight (Faculty Data)
Northwestern	Blackboard, moving to Canvas	Mediasite	Adobe Connect (sort of)	Campuspress (was EduBlogs) for Blogging.	Turning Technologies	Mediasite Flash Streaming Avalon	Polycom Tandberg/Cisco LifeSize, USB-based for Vidyo, Lync	Yes, pending legal review, not rolled out yet	Yes	Cascade, Drupal	Coursera	none	?				
Ohio State	D2L	MediaSite	Adobe Connect	Confluence	Piloting Top Hat	YouTube, iTunes,	Cisco Tandberg videoconferencing codecs that utilize h.323 for point to point connections and a Jamvee contract negotiated through Internet 2 for bridging multiple sites, also some FaceTime, Adobe Connect and Lync	Yes	Yes (individual, not site license)	Drupal	Coursera	campus digital publishing program (digitalpublishing.osu.edu): primarily iBooks, some ePub	Student interface to faculty evals available through PeopleSoft Student Center, and also OSU Mobile App	Turnitin	Lync, Yammer, other	Edublogs	cross institutional effort includes Office of Distance Ed and eLearning, University Center for Advancement of Teaching, Libraries, Colleges
Penn State	Angel (evaluating new options)	None	Adobe Connect	Confluence	iClicker	iTunes U, evaluating MediaCore	Polycom	Yes (not rolled out yet)	Yes	Drupal (ELMS extension), Evolution (homegrown), WordPress	Coursera			TurnItin	Yammer, Wordpress		

School	LMS	Lecture Capture	Web Conferencing	Wiki	Clickers	Digital Media	Video Conferencing	Office365 Y/N	Lynda.com Y/N	Content Mgmt.	MOOCs	e-Text	Fac. Evals.	Plagiarism Detection	Communications	Blogs	Other services/projects
Purdue	Blackboard Learn (Piloting Canvas)	Echo 360	WebEx (just ending Adobe Connect license)	Confluence	iClicker	Kaltura (working on iTunesU), Camtasio Studio, Snagit - also have greenscreen rooms around campus now	polycom	n	for faculty & staff, not students	Cascade	Purdue Next, Hubs (looking at Canvas)	SkyePack	Qualtrics	SafeAssign (looking into Turnitin)	Lync	WordPress, Bb	IMPACT cross-inst program, Informatics tools, Lon Capa, Course Signals, CourseEmail Lists, Respondus, Respondus Lockdown Browser, piloting Respondus Monitor
Rutgers	Sakai, Moddle, Blackboard, Pearson eCollege, various book publishers	Panopto, NJVid (NJ higher ed consortium) and Crestron, Camtasia Relay, home grown products	Adobe Connect, GoToMeeting, Eluminate, WebX, Google Hangout, Lync	Confluence	iClicker, Turning Technologies, smart phones	iTunes U, YouTube, Kaltura	Polycom, Tandberg, Lifesize, Vidyo	In Business School only	In one school	Wordpress, Zoomla, Drupal, Contribute, Moodle	Coursera		Evalsys in Sakai	Turnitin		WordPress	Online course creation, hybrid course creation, ePortfolios, web accessibiity, course mterial accessibility, training in Camtasia, clickers and any other tech faculty are interested in
Wisconsin	Central: Desire2Learn Campus: Moodle	Central: Podcast Producer Engineering: Mediasite	Blackboard Collaborate Adobe Connect Google Hangouts	Confluence	Central: iClicker Campus: tophat monicle	Kaltura iTunes U YouTube	Cisco Telepresence	Yes, later this year	Yes	No central application	Coursera	All major publishers; not managed by our unit	No online tool centrally supported		Yammer		Mobile Learning Incubator Learning Analytics Electronic Lab Notebooks Evaluation services Online course creation services (some by students) Educational Innovation Research data/data curation Blended Learning, fac dev programs