Overview of the eLearning@PSU Cooperative

June 2009

The E-Learning@PSU Cooperative was created by Provost Erickson following the recommendations of the Online Course-Sharing Task Force in June, 2003. The E-Learning@PSU Cooperative replaces the Campus Course Exchange. Courses are offered during all three sessions (fall, spring, summer) and Penn State faculty deliver all courses. The E-Learning@PSU Cooperative is housed within Undergraduate Education.

The goals of the eLearning@PSU Cooperative are to:

- Encourage and facilitate online course sharing among colleges and campuses
- Provide more diversity and flexibility of curriculum
- Promote curricular integrity
- Share rather than duplicating resources

How do Cooperative courses become available to students?

- Academic units develop online courses
- Courses submitted through the eLearning Coordinator of the offering unit
- eLearning Coordinator and Dean indicate that the course meets technical and pedagogical standards and courseware standards regarding copyright issues.
- Course is posted on eLearning@PSU Cooperative website (http://webhosting.its.psu.edu/elearning/)
- Campuses reserve seats in courses
- Students are aggregated into one section of the course regardless of their campus

What courses are available through the Cooperative?

- Undergraduate credit courses
- Variety of academic disciplines (currently 39 disciplines are represented)
- Number of courses continues to expand
- List of available courses will change from semester to semester
- All courses are entirely online—there are no face-to-face class meetings

What are the current challenges for the eLearning@PSU Cooperative?

- Communication across academic units and campuses
- Faculty capacity
- Understanding of the World Campus and e-Learning Cooperative across the University
- 24/7 seamless student access and support services
- Variability in campus buy in to online learning
- Intellectual property issues
- Defining the co-curricular student experience
- Multiple faculty use of a single course
- Open content
- Budget models
- Technology infrastructure
- Learning objects repository

eLearning@PSU Cooperative

Fall 2005- Spring 2009 Enrollments

	Fall		Spring		Summer		Total
	# of courses	Enrollment (non-offering unit)	# of courses	Enrollment (non-offering unit)	# of courses	Enrollment (non-offering unit)	
2005-06	27	303	31	572	14	38	913
2006-07	31	466	39	536	17	145	1,147
2007-08	41	615	48	975[1]	15	211	1,801
2008-09	47	1380[2]	50	1655[3]			

Campuses that have purchased 20 or more enrollments per semester.

	Spring 2008 Enrollments	Fall 2008 Enrollments	Spring 2009 Enrollments
Altoona	NA	NA	60
Beaver	49	52	26
Behrend	57	50	135
Berks	41	35	59
Brandywine	37	NA	NA
DuBois	NA	77	31
Fayette	NA	NA	49
Greater Allegheny	121	120	60
Harrisburg	147	209	250
Hazelton	NA	37	26
Lehigh Valley	61	53	112
Mont Alto	32	43	46
New Kensington	NA	NA	20
Shenango	33	31	47
Worthington Scranton	71	34	82

[1] Beginning of eLearning@PSU Pilot Program. Of these 975 enrollments, 152 were funded through the eLearning@PSU Pilot Program. Through the Pilot Program, Provost Erickson funded three registrations for each campus in the following courses: Anthropology 146, Art 002, Art 003, Communications 160, Energy and Geo-Environmental Engineering 101 & 102, Geography 160, and German 001, 002, & 003.

[2] Of these 1380 enrollments, 225 were funded through the eLearning@PSU Pilot Program.

[3] Of these 1655 enrollments, 226 were funded through the eLearning@PSU Pilot Program.

Blended Learning Initiative Overview

June 2009

The Blended Learning Initiative was approved and funded by Provost Erickson in 2004. The goals of the BLI are to increase access to courses, enhance flexibility, and improve student performance. This is being achieved through the creation of both online & hybrid versions of approximately 30 courses. The courses were chosen using the following criteria: high-enrolling courses not offered at all locations, courses with small enrollments at multiple campuses, courses that had high failure and/or attrition rates, key entry to major courses (so students could remain at a campus), and courses that were nominated by campuses.

All BLI courses are made available across the University. The online version of each course is offered through the eLearning@PSU Cooperative and the hybrid course materials are shared with all campuses at no cost. A hybrid course is one that combines traditional face-to-face class sessions with online activities. Face-to-face time is typically reduced by about 50% in a hybrid course at Penn State, but the percentage of face-to-face and online time differs for each individual course.

What Penn State Students Say about Hybrid Courses

- Hybrid courses require students to take more responsibility for their own learning
- Students study 4-6 hours/week, including face-to-face class time
- Hybrid courses foster improved time management skills
- Hybrid courses allow self-paced learning
- Regular communications with the instructor and other students are important
- Submitting assignments ahead of schedule helps avoid technological problems

Teacher Behaviors Associated with Higher Student Satisfaction and Better Grades

- Clear communication about important course topics and course goals
- Clear instructions about how to participate in course learning activities
- Clear communication about due dates and student tasks
- Provided guidance for understanding course topics
- Encouragement to explore new concepts and explore content-related questions
- Reinforce a sense of community among students
- Focus discussion on relevant issues
- Provide feedback on students' strengths and weaknesses
- Provide timely feedback
- Pose problems and use activities that pique students' curiosity

Student Behaviors Associated with Higher Student Satisfaction and Better Grades

- Use a variety of information sources to explore problems posed in the course
- Participate in online discussion to appreciate different perspectives
- Combine new information to answer questions raised in course activities
- Reflect on course content and discussion to understand fundamental concepts
- Describe ways to test and apply the knowledge created in the course
- Develop solutions that can be applied in practice
- Apply knowledge to work or other non-class related activities

Courses Developed through the Blended Learning Initiative (BLI)

Accounting 211: Financial and Managerial Accounting for Decision Making (4)
Astronomy and Astrophysics 001: (GN) Astronomical Universe (3)
Biological Science 004: (GN) Human Body: Form and Function (3)
Earth Sciences 105: (GN;IL) (AAA S 105) Environments of Africa: Geology and Climate Change (3)
Economics 002: (GS) Introductory Microeconomic Analysis and Policy (3)
Energy and Geo-Environmental Eng 102: (GN) Energy Conservation for Environmental Protection (3)
Geosciences 010: (GN) Geology of the National Parks (3)
History 021: (GH;US) American Civilization Since 1877 (3)
Landscape Architecture 060: (GA) History of Landscape Architecture (3)
Mathematics 021: (GQ) College Algebra I (3)
Mathematics 110: (GQ) Techniques of Calculus I (4)
Music 007: (GA; US) Evolution of Jazz (3)
Music 009: (GA; IL) Introduction to World Musics (3)
Nutrition 100: (GHA) Contemporary Nutrition Concerns (1.5)
Nutrition 251: (GHA) Introductory Principles of Nutrition (3)
Philosophy 012: (GQ) Symbolic Logic (3)
Spanish 001: Elementary Spanish I (4)
Spanish 002: Elementary Spanish II (4)
Spanish 003: Intermediate Spanish (4)
Statistics 200: (GQ) Elementary Statistics (4)

Courses Currently in Development through the Blended Learning Initiative (BLI)

Biological Science 002: (GN) Genetics, Ecology, and Evolution (3)
Biology 011/012: (GN) Introductory Biology I (3)/ (GN) Introductory Biology II (1)
Communications 150: (GA) The Art of the Cinema (3)
Mechanical Engineering 300: Engineering Thermodynamics I (3)

Courses to be Developed through the Blended Learning Initiative (BLI)

Business Administration 243
Finance 301 : Corporation Finance (3)
Mathematics 022: (GQ) College Algebra II and Analytic Geometry (3)
Management Information Systems 204: Introduction to Business Information Systems (3)
Supply Chain Mgmt 301: Supply Chain Management (3)

e-Testing: Innovative Examples

Combined Fall 2008 & Spring 2009 Data

The Testing Center opened in November 2008 and is jointly operated by the Schreyer Institute for Teaching Excellence and Teaching and Learning with Technology. The Center was completed in late 2007 and was fully operational by Spring 2008. The Center includes a secure, computer-based testing facility with 160 workstations and Scanning Operations for paper-based exams. The testing facility is convenient for faculty who no longer need class time for testing and e-testing promotes use of innovative testing methods. Students select a convenient time from a faculty-specified range. Students use their Penn State IDs to enter, which automatically links their assigned workstation with the correct exam. Many faculty also administer web-based tests, quizzes, and surveys using the quiz tool available through the ANGEL course management system.

Number of Students by Week and Assessment Type*

	Testing Center								Online
	Exam	Final	Quiz	Survey	Other	Week Total	Slots Available	% Occupied	ANGEL Quiz
Week 1	210	0	147	0	0	357	21,000	2%	107,021
Week 2	86	0	517	0	1,669	2,272	21,000	11%	180,424
Week 3	449	0	2,529	0	39	3,017	21,000	14%	255,657
Week 4	7,291	10	1,544	0	0	8,845	21,000	42%	214,150
Week 5	8,839	0	450	0	0	9,289	21,000	44%	202,473
Week 6	7,891	0	2,217	0	0	10,108	21,000	48%	204,054
Week 7	3,586	287	927	0	0	4,800	21,000	23%	169,673
Week 8	6,454	0	418	0	0	6,872	21,000	33%	201,474
Week 9	2,669	0	2,381	0	0	5,050	21,000	24%	193,056
Week 10	5,565	0	520	0	0	6,085	21,000	29%	179,863
Week 11	11,286	0	2,451	0	0	13,737	21,000	65%	194,628
Week 12	5,591	0	606	0	0	6,197	21,000	30%	170,538
Week 13	3,712	0	2,247	0	0	5,959	21,000	28%	127,668
Week 14	7,088	0	359	212	0	7,659	21,000	36%	98,799
Week 15	3,143	2	1,601	171	0	4,917	21,000	23%	119,716
Week 16	10	16,113	3	0	0	16,126	20,770	78%	79,114
Total	73,870	16,412	18,917	383	1,708	111,290	335,770	33%	2,698,308

* Thanksgiving week and Spring Break week are not included. Finals are administered in Week 16 and have longer, thus fewer time slots. Students with multiple assessments in the Testing Center or Online are counted multiple times. The last column reports the number of online quiz submissions from active ANGEL courses.

Number of Students by Day (Testing Center only)

	Exam	Final	Quiz	Survey	Other	Day Total	Slots Available	% Occupied
Saturday	0	880	0	0	0	880	1,240	71%
Sunday	0	614	0	0	0	614	1,240	50%
Monday	13,171	3,081	2,483	82	0	18,817	66,410	28%
Tuesday	18,325	2,871	2,128	176	29	23,529	66,410	35%
Wednesday	16,034	3,011	3,140	0	1	22,186	66,720	33%
Thursday	15,846	3,599	9,106	123	1,100	29,774	67,030	44%
Friday	10,493	2,356	2,061	2	578	15,490	66,720	23%
Total	73,870	16,412	18,918	383	1,708	111,290	335,770	33%

e-Testing: Innovative Examples

Combined Fall 2008 & Spring 2009 Data

Number of Students by Time of Day (student-selected; Testing Center only)

	Exam	Final	Quiz	Survey	Other	Total	Slots Available	% Occupied
Morning (7-11 am)	7,302	3,538	1,334	41	4	12,219	72,925	17%
Midday (11-2)	14,885	3,356	4,845	133	17	23,236	71,220	33%
Afternoon (2-5 pm)	19,054	3,545	6,078	138	963	29,778	71,375	42%
Evening (5-9 pm)	27,984	3,729	5,832	63	690	38,298	94,340	41%
Late Evening (9-11 pm)	4,644	2,244	829	8	34	7,759	25,910	30%
Total	73,869	16,412	18,918	383	1,708	111,290	335,770	33%

Number of Assessments by Type (Testing Center only)

	Exam	Final	Quiz	Survey	Other	Total
Fall 08	219	40	69	1	0	329
Spring 09	223	48	51	1	0	323

Final Exams*

	Testing Center		Computer Labs		Weekend Testing		ANGEL Web Quiz	
	# Finals	# Students	# Finals	# Students	# Finals	# Students	# Finals	# Students
Fall 08	40	8,864	0	0	13	1,494	NA	40,326
Spring 09	48	7,548	6	1,925	0	0	NA	38,788

* The Testing Center cannot accommodate all requests for finals. In Fall 2009, students were offered the option of a weekend final. In Spring 2009, student computer labs were adapted for finals testing.

Course Summary Information

	Testing Center						ANGEL Averages	
	# Students	# Courses	# Sections	# Faculty	# Dept.	# Colleges	# Active Courses	# Students
Fall 08	17,070	44	150	51	26	9	10,324	79,396
Spring 09	16,104	56	164	63	29	10	9,900	75,302

Academic Units using the Testing Center Fa08-Sp09 (Testing Center only)

Colleges	Departments
Agricultural Sciences	Crop & Soil Sciences, Entomology, Horticulture
Arts & Architecture	Arts & Architecture, Architecture & Landscape Architecture, Theatre
Business - Smeal	Accounting, Finance, Supply Chain & Information Systems
Communications	Telecommunications
Earth & Mineral Sciences	Energy & Mineral Engineering, Geography, Geosciences
Engineering	Electrical Engineering
Health & Human Development	Communication Sciences & Disorders, Health Policy & Administration, Hospitality Management, Human Development & Family Studies, Kinesiology, Nutritional Sciences
Liberal Arts	Communication Arts & Sciences, Labor Studies & Employment Relations, Religious Studies, Sociology, Spanish, Italian & Portuguese
Nursing - School of	Nursing
Science - Eberly	Astronomy & Astrophysics, Biochemistry & Molecular Biology, Biology, Chemistry, Math, Physics, Statistics

e-Testing: Innovative Examples

Fall 2008 & Spring 2009

Innovative Uses of Computer-Based Testing

Mathematics

The Mathematics department has recently redesigned College Algebra I (MATH 021) to incorporate Mastery Learning, in which students demonstrate their learning before moving on to new material. Students take a series of quizzes during designated windows of time during the semester. Each student has three opportunities to demonstrate mastery by achieving a score of 7 out of 10 possible points on each quiz. Students appreciate being able to "test out" of material they are already know and having multiple opportunities to achieve the learning outcomes for the course. For both faculty and students, mastery quizzing provides more frequent feedback about students' learning and progress than in traditional courses.

Engineering and Mineral Engineering

In his Energy and the Environment course (EGEE 101) Asst. Professor Jonathan Matthews includes essay questions in his exams, which also include more traditional short-answer and multiple-choice questions. The testing software used in the Testing Center allows Prof. Mathews to specify the amount of time students are allowed to complete the essay questions. Essay questions written on the computer are not only easier to read, but graders can easily locate specific terminology, themes, and concepts and provide prompt feedback to students.

Spanish

In Fall 2009, the Spanish department will administer their diagnostic exam for the Elementary Spanish course series (Spanish 1, 2 & 3) in the Testing Center. Students will take the exam in the first week of classes and those who achieve a specific score are placed in higher levels of the 3-course series. Previously, students were assigned a specific date and time for a paper-based exam and the department expended significant time and resources scheduling and administering these exams. This fall, students will schedule their own exam within a specified two-day period in the Testing Center. Use of the Testing Center will not save scarce departmental resources and provide more flexibility for students. In future semesters, the Spanish department has plans to improve the diagnostic test by integrating audio and/or video into the exam.

Physics

Dr. John Hopkins, Senior Instructor of Physics, teaches Introductory Physics I (PHYS 250) and for several semesters has used the Testing Center to administer Physics Concept Inventories to assess students' learning. He uses the Concept Inventories as a "pre-test," which helps him determine students' incoming knowledge. Since the Concept Inventory tests are administered in the Testing Center, Dr. Hopkins can devote more class time to concepts that are particularly challenging or unfamiliar to students. He also uses the Concept Inventories as "post-tests" after instruction to measure students' learning and to gather information on the success of particular teaching strategies.

e-Testing: Innovative Examples

Fall 2008 & Spring 2009

Communication Arts and Sciences

Effective Speech (CAS 100C) introduces students to the principles of communication through analysis and evaluation of messages. The Testing Center allows Graduate Student Instructor Hilary Jones to create and deliver exams that include video clips for students to analyze and evaluate. Computer-based tests provide students with a wider variety of examples from different media sources than can be included in a paper-based exam, which can include only print media examples. Students appreciate the computer-based exams because they can view, rewind, and pause the video while they compose their essays. Ms. Jones is developing technology-enhanced instructional skills that are highly valued in the academic job market.

Electrical Engineering

Instructor Andy Mayers teaches Electrical Circuits and Power Distribution (EE 211), a course in which student learn about AC & DC power, basic circuit analysis, and the fundamentals of transformers and electric motors.

Not surprisingly, exams in EE 211 include a variety of equations that students must understand, as well as solve. Computer-based testing allows Dr. Mayers to alter different parts of the equations to create a unique exam for each student. In a single power question, he might can change the equation by varying the current type (AC/DC), volts, or the horsepower. While each student receives a different exam, the level of difficulty and the topics are consistent across all students.

Management Information Systems

Dr. Ed Glantz and Dr. Kathleen Riley teach Introduction to Business Information Systems (MIS 204) courses, which enroll 1000 students per semester. When using paper-based in-class testing, these instructors had to limit the number of exams to 2 Midterms and a Final, now they use e-testing to administer 5 Midterm exams. Students in these courses receive more frequent and accurate information about their progress and have more opportunities to make corrections, if necessary. More frequent testing can also reduce the pressure that leads some students to cheat because grades are not determined by just a few “high stakes” exams and students can schedule their exams at a time of day when they are at their best.

Chemistry

Chemical Principles I (CHEM 110) is a general chemistry course that emphasizes the relationships between microscopic structure and the macroscopic properties of matter. In these courses, Dr. Mary Jo Bojan has created a series of Skill Checks that students complete before she discusses the topic in class. Students have unlimited opportunities to use the Skill Checks, but to receive credit for their learning, students must attain a perfect score before the topic is covered in class. This not only encourages the students to read and understand the material before class, it also enhances the class sessions because students more willing to participate and ask questions in class. Dr. Bojan has also instituted Pre-Quizzes—ungraded quizzes that students take in the Testing Center the day before an exam. The pre-quizzes encourage students to take responsibility for their own learning by showing them what topics they may need to revisit before the exam.

Informational Report on Penn State's Course Management System
June 2009

In the spring of 2001 the Provost asked a committee to recommend a course management system that could be used throughout resident instruction and the World Campus. The goal was to adopt a system that made it easy for faculty to use the Web in teaching and create a **common learning environment** available to faculty and students at all 24 Penn State locations.

ANGEL usage peaked in the Fall 2008 semester. Below is a comparison of ANGEL usage in the debut semester and the peak semester.

	Spring 2002	**Fall 2008**
Active course sections in ANGEL[1]	2,000	10,610
Percent of total PSU course offerings with ANGEL sections	13%	70%
Number of students with at least one ANGEL course section	33,000	80,007
Number of student-course-section enrollments[2]	--	294,917
Number of course editors[3] actively using ANGEL	1000	6,839

[1] Active Course Sections are defined as a course section with one or more enrolled students and a course section enabled for student access via ANGEL, but does not include Independent Study course sections.
[2] A student with three courses in ANGEL is counted three times here.
[3] Course Editors are defined as faculty, instructors, teaching assistants, or instructional designers.

University-wide, 89% of the total student population is using ANGEL. On average, a student is enrolled in 3.7 course sections in ANGEL. Adoption is somewhat variable by campus location: 75% of total course sections offered at University Park used ANGEL compared to 29% at one of the Commonwealth Campuses. At Penn State Hazleton, more than 90% of the sections use ANGEL.

The use of the ANGEL Quiz feature for secure testing has greatly expanded since the Penn State Testing Center opened in the latter weeks of the Fall 2007 semester in the Pollock building at University Park. Over 53,300 students took ANGEL Quizzes (exams, quizzes, surveys, and finals) with a 99.9% successful submission rate. This is a significant increase when compared to nearly 1,500 ANGEL Quiz submissions in the last six weeks of Fall 2007.

Some important non-instructional uses of ANGEL include the Course Submission and Consultation System (CSCS) and the Online Student Rating of Teacher Effectiveness (SRTE) pilot project. CSCS provides a platform for faculty to submit all courses online (via ANGEL) for consultation and formal approval in accordance with the Faculty Senate's Guide to Curricular Procedures. ANGEL programmers have developed an Online SRTE program that is integrated with ANGEL courses and allows students to access the Online SRTEs through their ANGEL accounts.

Lastly, we have been very successful in our partnership with ANGEL Learning Inc. (the vendor) and they have served us well. The recent acquisition of ANGEL Learning by Blackboard Inc. requires us to develop a strategic plan (5-year) for sustaining a common e-learning environment. Hence, an e-Learning Strategy Committee will be charged specifically to make recommendations toward sustaining a common cost-efficient, scalable, and instructionally effective e-learning environment for Penn State well into the future.

Blogs at Penn State

http://blogs.psu.edu

June 2009

The Blogs at Penn State provide the University community an easy to use a web-publishing environment that is available to all faculty, staff, and students.

What is a blog? Blog is an abbreviation of Web Log. It is an easy way to publish your thoughts—and share them—on the Web. Students use the Blogs for taking notes, teamwork, personal reflection, sharing pictures, and increasingly for THEIR e-Portfolios. In the first year of this program nearly 10,000 users have used the Blogs at Penn State to support their academic work. We expect this number to substantially increase in the next academic year.

A number of high-enrollment courses across Penn State have adopted the Blogs at Penn State as an online publishing platform to support numerous types of expression.

- In the English Composition program, blogs are being used in Technical Writing (ENGL 202C) to give students experience designing documents for online consumption and to provide them with an e-portfolio of professional writing. In the Rhetoric and Composition (ENGL 015) course, students will use blogs to publish their writing assignments and to the discussion feature to conduct peer reviews of other students' postings. Faculty are expanding the kinds of writing they assign to include writing for digital media, in addition to traditional essays and papers.
- In the Mass Communications program's introductory course (COMM 180), instructors are using blogs to complete weekly reaction and response entries to faculty postings. For example, students might be asked to react to an instructor's blog post, write about an event, review a journal article, or react to print or digital news publication.

Other noteworthy examples of how blogs are being used academically and for co-curricular purposes include:

- Students in the College of Education used their blog-powered e-Portfolios to regularly post written reflections on their learning experiences (coursework and field experiences). This experience provided them with evidence of their professional development and achievement of academic program outcomes.
- All 300 incoming Schreyer Honors College Scholars will use blogs to reflect on their college experience, with specific reference to the four primary themes of the Honors College mission: Excellence, Global Perspectives, Leadership, and Civic Engagement. Honors faculty advisors will read Scholar blog entries to guide discussions, inform student research, and assess student progress.
- Biology faculty are changing the way they teach introductory Biology labs for non-majors (BIO 012). A variety of lab simulations and activities are being developed for use within a lab blog. Students access the blog before attending class to interact with new content and to comment on lab demonstrations and simulations. Preliminary results indicate improved student understanding and increased participation in face-to-face lab sessions.
- In Fall 2009, Student Affairs will begin transitioning some of the 1600 Student Groups & Organizations from standard websites into the Blogs at Penn State. The blogs will provide groups with an easy way to update group information, archive past material, and ensure continuity when group leaders and participants graduate.

Finally, many more students are maintaining their blogs semester over semester, working to continually write and reflect on their academic and personal growth.

The Digital Commons

http://digitalcommons.psu.edu

June 2009

The Digital Commons are a series of centrally supported digital media studios at all Penn State campuses that provide the required technology, virtual and hands on training, and faculty development for the appropriate utilization of digital media for teaching and learning.

With the rise in use of digital media, the Digital Commons have provided faculty with a local resource that helps them rethink their courses. In addition to faculty support, hundreds of students schedule appointments each month to use the Digital Commons to create and use multimedia for course projects. Visit the Digital Commons student showcase at http://digitalcommons.psu.edu/spotlight to see examples of students' work from across the Commonwealth.

At University Park, Teaching and Learning with Technology (TLT) staff manage media studios in Pollock, Pattee, and Sparks. To support the needs of our spaces at the campuses, two Digital Commons Consultants spend at least one day a month at each campus working with faculty, staff, and students. Digital Commons services at all campuses include:

- Software and studio equipment training
- Video and audio recording, editing, and publishing
- Project planning
- Media format conversion (VHS <-> DVD <-> Web)
- Troubleshooting
- Instructional Design Support

Support for using the Digital Commons and media studios provided by staff from TLT and Educational Technology Services staff. In addition to providing support for integrating multimedia into teaching and learning, our staff help the Penn State community understand copyright, fair use, and creative commons licensing. Helping to educate our audiences about copyright and how to appropriately use online resources is a big part of what we do.

Staff provide weekly workshops for small groups to help extend their skills. To ensure that support is available across the Commonwealth, our staff have developed dozens of online tutorials that can be used at anytime. Each Fall semester the Digital Commons sponsors a full day "Digital Commons Tailgate" professional development event. This regional professional development event and symposium rotates to a new campus each year.

All of these factors are leading to continued growth at all locations. Our data illustrate monthly increases in usage. For example, April 2009 saw a 61.9% growth rate in student appointments over April 2008. We believe this is due to several factors, including increased faculty access to and use of the Digital Commons, rise in the use of digital media, and student familiarity with tools and strategies for using digital resources. As students and faculty become more sophisticated users of multimedia and digital technology, the importance of the Digital Commons to teaching and learning at Penn State will grow.