Summary

Spring 2017 saw **8,181 students and faculty** use the Media Commons and Maker Commons initiatives across the Commonwealth. Much of this use was focused in **166 classes** in nearly every discipline offered at Penn State. To facilitate these interactions outside of University Park, traveling consultants **visited campuses 63 times** to offer instruction and consultations.

One Button Studios at 14 campuses helped students and faculty create 11,846 academic videos, comprising over 16 straight days of video. During the Spring, University Park staff made 5 campus visits in support of One Button Studio installations. Students across the state also created 3,571 3D prints in pursuit of their own curiosity and course work.

The report that follows breaks down our interactions with students and faculty and examines engagement levels with services offered, locations, and by individual colleges. Throughout the report we'll draw attention to exciting assignments, surprising class partnerships, and interesting observations from the semester - stories that tell the ways in which Penn State faculty and students are pushing the boundaries of education into the future. We'll also point out usage and technology trends that draw from Media Commons' proven history in supporting multimedia and emerging technology as well as reflect on challenges and opportunities in the coming semesters.

People Helped

Faculty and students used Media Commons and Maker Commons services in a variety of ways in all of our locations over the course of the semester. These charts count how many people were aided by our consultants in either 1-on-1 consultations or in-class workshops.

Media Commons @ University Park	# of People Helped
Pattee Library Knowledge Commons	3,368
Pollock Building Computer Lab	245
PAMS Library, Davey Lab	137
Agricultural Sciences & Industries Building	24
Hosler Building	150
Media Commons Workshops	2,844
Maker Commons Workshops	170

Immersive Experiences (IMEX) Workshops	90
University Park Total	7,028

Featured Stories:

- The Media Commons in room 109 of the Agricultural Sciences & Industries building was closed for most of the semester. This space is being renovated into our new Immersive Experiences Lab for Fall 2017.
- Pollock building Media Commons has added a Lightboard to one of its two One Button Studios to create a faculty-focused recording space.

Media Commons @ Western Campuses	# of People Helped
Altoona	40
Beaver	297
Behrend	81
DuBois	0
Fayette	0
Greater Allegheny	13
Harrisburg	37
Mont Alto	102
New Kensington	71
Shenango	0
Western Campuses Total	641

Featured Story:

• The Shenango campus installed a One Button Studio at the end of the Spring term.

Media Commons @ Eastern Campuses	# of People Helped
Abington	0
Berks	272
Brandywine	169
Great Valley	0
Hazleton	0
Lehigh Valley	0
Schuylkill	52
Wilkes-Barre	0
Worthington Scranton	19
York	0
Eastern Campuses Total	512

Featured Story:

 Three sections of ENGL 202C at Berks worked with the Media Commons on podcast assignments. The students were challenged with a technical writing assignment in which they would explain how to complete a given task, e.g. changing a flat tire. They took that written assignment, adapted it for an audio project, and used GarageBand to complete a professional grade podcast of step-by-step directions for completing a task.

Class Partnerships Across Colleges

Media Commons consultants partner with faculty from every college at Penn State to help design multimedia and making assignments, provide workshops for students, and 1-on-1 consultations as the students complete their work. This table represents how many classes were worked with in which colleges during the semester.

Colleges	UP Media Commons	UP Maker Commons	UP IMEX	Western Campuses	Eastern Campuses	Totals by College
Agricultural Sciences	0	0	3	0	0	3
Arts &	3	1	0	0	0	4

Architecture						
Bellisario Communications	2	0	0	0	4	6
Earth & Mineral Sciences	13	0	0	0	2	15
Education	1	0	0	0	2	3
Engineering	1	5	0	0	0	6
Health & Human Development	2	2	0	7	1	12
Information Sciences & Technology	2	0	0	3	2	7
Liberal Arts	77	2	3	6	5	93
Eberly Sciences	1	0	0	4	2	7
Nursing	0	0	0	2	0	2
Smeal Business	3	1	0	0	4	8
Totals	105	11	6	22	22	166

Featured Stories:

- The College of Liberal Arts contains our largest partnership, ENGL 15, which accounts for 46 of the classes. ENGL 15 is a required course and provides students with early exposure to Media Commons and TLT resources.
- Spring semester 2017 was the first semester to offer 360° video workshops and support 360° video assignments, notably in the College of Agricultural Sciences and the College of Liberal Arts.
- AEE 349, Shop Processes for Agricultural Educators, was the inaugural class to use 360° videos as a student assignment. Students used the new medium to show Ag Education processes and procedures, like welding, laying patio pavers, or safety protocols.
- Biology 406 students at University Park created videos of an example of symbiosis or critical evaluation of primary literature.

Campus Engagement

Campuses often don't have their own local Media Commons support and so rely on our consultants to visit campus to work with faculty and provide workshops for students. We host several tailored faculty events each semester to discuss opportunities and visit campuses as often as possible to support class partnerships.

Western Campuses	# of Classes	Campus Events	Campus Visits*
Altoona	1	1	1
Beaver	8	2	12
Behrend	2	0	3
DuBois	0	0	1
Fayette	0	0	0
Greater Allegheny	2	0	1
Harrisburg	2	0	2
Mont Alto	2	0	3
New Kensington	4	1	5
Shenango	1	0	3
Totals	22	4	31

* Campus Visits include travel to campus for teaching workshops, faculty consultations, meeting with students, hosting events, equipment and computer service, and/or One Button Studio tune-ups.

Featured Story:

Students in ENGL 202D at the Beaver campus created campus improvement pitch videos that were shown in class in support of group presentations. The course, taught by Tiffany MacQuarrie, saw teams researching viable enhancements to campus learning spaces, programming offerings and student life amenities. Video projects synthesized the findings of this research and packaged it together in an engaging way for a broad audience. Media Commons provided in-class training on our resources, video production and storyboarding and then followed up with in-person storyboard review sessions and remote support for ten groups of learners.

Eastern Campuses	# of Classes	Campus Events	Campus Visits*
Abington	0	0	2
Berks	12	0	11
Brandywine	6	0	10
Great Valley	0	0	6
Hazleton	0	0	0
Lehigh Valley	0	0	1
Schuylkill	3	0	1
Wilkes-Barre	0	0	0
Worthington Scranton	1	0	1
York	0	0	0
Totals	22	0	32

* Campus Visits include travel to campus for teaching workshops, faculty consultations, meeting with students, hosting events, equipment and computer service, and/or One Button Studio tune-ups.

Featured Story:

 Two classes, one at Berks campus and one at Worthington Scranton campus, participated in the Mobile Media Project. 19 iPads Minis were provided to students to use for the semester. Students at Worthington Scranton used the iPads to create videos with the iMovie app with content focused on campus diversity. Berks campus students also used the iPads and iMovie app to create student teaching assignments videos.

One Button Studio

Media Commons supports the One Button Studio project across many campuses. The One Button Studio allows students and faculty to simply create good quality academic videos, often for recording presentations, lectures, and demonstrations, or completing class assignments.

Location	# of Videos Created	Total Duration of Videos H:M:S
Pattee Library Knowledge Commons (2 studios)	5,585	195:51:23
Pollock Building Computer	912	31:46:23

Lab (2 studios)		
PAMS Library, Davey Lab	509	16:23:57
Hosler Building	689	25:37:00
University Park Total	7,695	269:38:43
Abington	470	11:35:45
Altoona	79	8:36:00
Beaver	Not reported	Not reported
Behrend	964	21:24:25
Berks	731	13:17:04
Brandywine	327	5:52:04
Harrisburg	87	5:23:38
Lehigh Valley	237	6:57:51
Mont Alto	260	12:28:06
New Kensington	96	3:20:40
Schuylkill	114 (Information not available for infographic)	0:51:33 (Information not available for infographic)
Worthington-Scranton	588	24:23:26
York	197	5:31:05
Total One Button Studio Use	11,846	389:20:00

Featured Stories:

- Chemical Engineering 470 used the One Button Studio to create a presentation on their senior design project
- Campuses with One Button Studio spaces have seen a dramatic revitalization of video project partnerships, both with new faculty and returning instructors.

3D Printing

The Maker Commons offers students at University Park, the Commonwealth Campuses, and World Campus access to 34 3D printers through an online submission process. The printers are located at University Park but, through a partnership with University Libraries, are able to ship prints to any student for easy pick-up.

Unique PSU Users	741
Hours of Print Time	12,038
Successful Prints	3,571
New Print Requests	2,365
Filament Used	116,079 grams

Featured Stories:

- 90% success rate on print requests up from 70% in Fall 2016!
- Averaging 108 prints per printer in the semester.
- 32.5 grams of filament used per print on average.

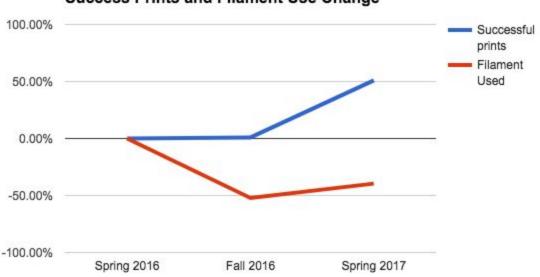
Website Refresh & Rebuild

Beginning in January, Media Commons overhauled its website to bring its design in line with other related services including Maker Commons and the Immersive/Design Experiences Labs. While applying lessons learned from these properties to mediacommons.psu.edu, new features and methods for presenting content in easily understandable and aesthetically pleasing ways were also pioneered - and will be applied back to the other connected service sites. The new site aims to be not only a valuable resource for students, an inspiration for faculty and a tool for support staff but also a more powerful teaching aid for consultants in the classroom.

- Staff spent **193 hours (24 work days/8 full days)** of dedicated time moving content, creating new graphics and refining materials.
- **45 pages of content** were either merged with other content or removed in order to streamline the visitor experience, bringing the total to **111 pages**.
- The **Community section** received a connected services section that explains how Media Commons fits in with Maker Commons, Immersive Experiences Lab and Design Experiences Lab in addition to the larger realm of TLT.

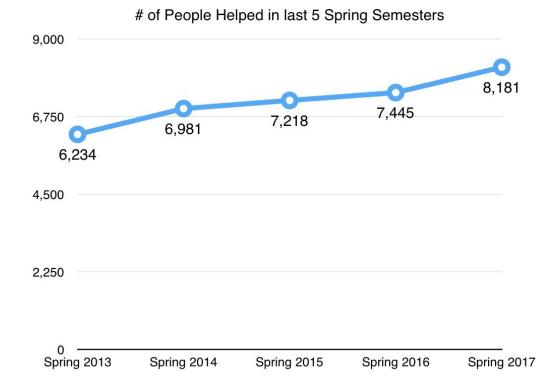
Notable Trends

 Successful prints have increased each semester while filament per print has been going down. This demonstrates higher level of output at a lower cost. A couple of factors played into achieving this outcome. Our print success rate increased from 70% to 90% which decreased wasteful filament use. We created and implemented an app into our submission workflow that checks a submitted file for certain parameters and flags options that can often lead to failed prints. We also restricted non-class print submissions to 30 grams which allowed us to increase the number of successful prints completed in a semester.



Success Prints and Filament Use Change

 Utilization of Media Commons services during the spring semester has increased by nearly 25% over the last five years.



Challenges & Opportunities

- Official upcoming launch of <u>Immersive Experiences Lab</u>.
 - We will be replacing Kristen McAuley's Media Commons consultant position with a dedicated Immersive Experiences consultant position over the summer.
 - The team is currently developing workflows, workshops, and support material to be deployed in the fall.
 - All new processes and content being created are done so with an eye towards scaling the technology and initiative to the campuses. A number of campus faculty have already expressed interest in using 360° video in their classroom.
- As Media Commons further hones its support offerings for the One Button Studio (owing to taking on primary support for the resource), further partnerships within and outside the University will lead to expanded opportunities to collaborate and grow.
- Consultants will be exploring new prototyping technology over the summer for possible inclusion in the Invention Studio. Refreshing our workflows and available technology regularly will help keep the Maker Commons current, exciting, and essential for students.