Summary

Fall 2017 saw **12,057 students and faculty** use the Media Commons, Maker Commons, and Immersive Experiences Lab initiatives across the Commonwealth. Much of this use was focused in **240 classes** in nearly every discipline offered at Penn State. To facilitate these interactions outside of University Park, traveling consultants **visited campuses 64 times** to offer instruction and consultations.

One Button Studios at 16 campuses helped students and faculty create **11,637 academic videos**, comprising over **20 straight days of video**. During the Fall, University Park staff made **2 campus visits** in support of One Button Studio installations. Students across the Commonwealth also created **3,171 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	4,894
Pollock Building Computer Lab	353
PAMS Library, Davey Lab	198
Immersive Experiences Lab, Agricultural Sciences & Industries Building	7
Media Commons Workshops	3,713
Maker Commons Workshops	678

Immersive Experiences (IMEX) Workshops	32
University Park Total	**9,843**

People Helped by Service
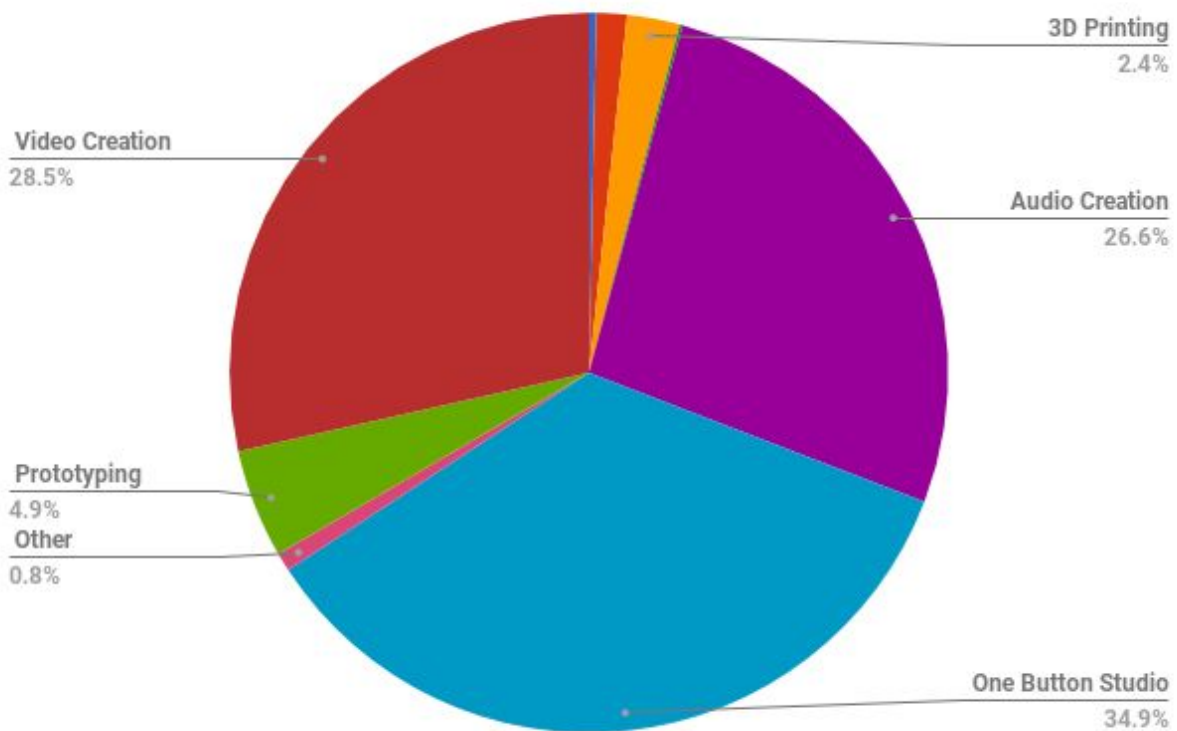
360 Video Creation	3D Modeling	3D Printing	3D Scanning	Audio Creation	One Button Studio	Prototyping	Video Creation	Other
32	135	234	13	2,621	3,439	481	2,806	82

Featured Story:

- AED 322: Visual Culture & Educational Technologies, taught by Karen Keifer-Boyd at University Park, had their first 360° immersive video assignment. Students filmed themselves in 360° playing various board games where each game would represent different social justice issues. Students combined this footage with news media related to the topic. This culminated in a 17-minute video that was screened as an art exhibit in the Immersive Experiences Lab.

Media Commons @ Western Campuses	# of People Helped
Altoona	125
Beaver	303
Behrend	119
DuBois	-
Fayette	-
Greater Allegheny	42
Harrisburg	469
Mont Alto	109
New Kensington	91
Pittsburgh Center	8
Shenango	49
Western Campuses Total	**1,315**

Featured Story:

- Media Commons has expanded its partnership with the English department at Beaver, now offering in-class instruction as well as in-person and remote storyboard review for students in eight course sections of ENGL 15.

Media Commons @ Eastern Campuses	# of People Helped

Abington	141
Berks	407
Brandywine	284
Great Valley	9
Hazleton	28
Lehigh Valley	-
Schuylkill	-
Scranton	30
Wilkes-Barre	-
York	-
Eastern Campuses Total	**899**

Featured Story:

- A podcasting assignment created by Julie Gallagher at Penn State Brandywine will now become a permanent project for History classes for semesters to come. The assignment is based on the "Presidential" podcast by the Washington Post. Students pick a historic figure and create a biographical telling of the figure's life, complete with sound effects and music. Students either work independently or in pairs, and use GarageBand to edit their podcast assignments together.

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.

Partnered Service Key: Media Commons - **Maker Commons** - *Immersive Experiences Lab* (Total)

Colleges	University Park	Western Campuses	Eastern Campuses	Totals by College
Agricultural Sciences	9	-	-	9 **(9)**
Arts & Architecture	5 - **1** - *4* (10)	1 - **1** (2)	**1**	6 - **3** - *4* **(13)**
Business	-	2	6	8 **(8)**
Communications	2	1	2	5 **(5)**
Earth & Mineral Sciences	7	-	-	7 **(7)**
Education	**1**	2	4	6 - **1 (7)**
Engineering	1 - **10** (11)	*1*	-	1 - **10** - *1* **(12)**
Health & Human Development	5 - **1** (6)	2	3	10 - **1 (11)**
Information Sciences & Technology	**2**	4 - **1** (5)	1 - **1** - *1* (3)	5 - **4** - *1* **(10)**
Liberal Arts	115 - **16** (131)	16	7	138 - **16 (154)**
Nursing	-	1	-	1 **(1)**
Sciences	**1**	1	1	2 - **1 (3)**
Totals	144 - **32** - *4* (180)	30 - **2** - *1* (33)	24 - **2** - *1* (27)	198 - **36** - *6* **(240)**

Featured Stories:

- For the first time at University Park, Lynn Klees' Nutrition 360 students were asked to create a webpage using Adobe Spark, to house all of their nutrition research, thoughts, and content created for the course. This included blog posts, public service announcements with accompanying video, and the creation of their Brochure assignment, in order to establish a professional portfolio of work.
- At Altoona, the Railroad Transportation Technology (RTE) program began using 360º video equipment provided through IMEX to document in the field best practices and

procedures. In-class training for students in RTE 303 followed faculty consultation throughout the semester.

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	4	-	4
Beaver	11	-	5
Behrend	3	-	5
DuBois	-	-	-
Fayette	-	-	-
Greater Allegheny	2	-	3
Harrisburg	4	-	2
Mont Alto	5	-	3
New Kensington	3	-	5
Shenango	-	-	1
Center in Pittsburgh	1	-	4
Totals	**33**	**-**	**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:

- The inaugural cohort of Study Away students at the Penn State Center in Pittsburgh arrived this Fall. Media Commons provided in-class training on documenting their

experiences as semester-long interns at community improving organizations throughout the city. This embedded teaching and support experience spanned four in-person and two remote interactions - in addition to the initial co-development of the assignment. Completed videos will provide not just evidence of the contributions made during participants' stays but also direct examples to future interested students, faculty and groups in the Pittsburgh community. (examples: 1, 2)

Eastern Campuses	# of Classes	Campus Events	Campus Visits*
Abington	5	-	8
Berks	9	-	5
Brandywine	8	-	11
Great Valley	-	2	6
Hazleton	2	-	2
Lehigh Valley	1	-	-
Schuylkill	-	-	-
Wilkes-Barre	-	-	-
Worthington Scranton	2	-	2
York	-	-	-
Totals	**27**	**2**	**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:

- Students began using Adobe Spark this semester at the eastern campuses. Of special note was the use of Spark Video in SUST 200 at Penn State Abington. For the assignment in SUST 200 the students were challenged to create a video based on the prompt of "what nature means to me?" The students created videos incorporating footage they filmed, photos they collected from online resources, and narration they recorded. The entire project was completed within Adobe Spark Video.

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)	5,435	239:32:22
Pollock Building Computer Lab (2 studios)	751	32:29:8
PAMS Library, Davey Lab	577	45:20:17
University Park Total	**6,763**	**317:21:47**
Abington	244	11:37:42
Altoona	45	0:25:14
Beaver	872	14:09:56
Behrend	347	13:22:21
Berks	630	18:22:13
Brandywine	618	13:21:30
Harrisburg	127	6:19:57
Hazleton	*newly installed at end of	Fall 2017 semester
Lehigh Valley	638	37:25:05
Mont Alto	305	5:08:43
New Kensington	239	8:46:03
Schuylkill	120	0:45:00
Scranton	420	16:03:33
Shenango	70	3:09:45
York	199	11:30:27

Total One Button Studio Use	11,637	502:38:02

Featured Stories:

- The bottom floor of the Penn State Hazleton Campus Library was renovated, and with this renovation came a brand new One Button Studio! Their new OBS was soft-launched for late-Fall semester, with a grand opening to take place at the beginning of Spring 2018.
- Chemistry 110, taught by Dr. Joseph Houck at University Park, utilized the Lightboard and OBS for their first World Campus class for fall semester. Recordings were posted on learning management systems to aid worldwide learners in teaching chemical principles.
- During Summer 2017 an updated One Button Studio app and some hardware upgrades were deployed to campus studios. This upgrade greatly improved the reliability of the studios as well as improved the data collection capabilities of the app leading to better and easier reporting of studio use by the campuses.

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	855
Hours of Print Time	11,028
Successful Prints	3,171
New Print Requests	2,055
Filament Used	126,985 grams (~280 lbs)

Featured Story:

- Architectural Engineering 124 at University Park introduced a new assignment for students to design and 3D print architectural building joints which were used to build structures with yardsticks. The yardstick structure then formed a tower which was subjected to a load test by crushing it to its breaking point.

Notable Trends

- Strengthening Campus Partnerships through Shared Data Collection - During Summer 2017, Media Commons partnered with University Libraries to advocate for the adoption of the LibCal resource scheduling system to reserve Media Commons resources across the Commonwealth. Improving our data collection helps us to better understand student needs at individual campuses and scale resources at each campus appropriately. Nine campuses, including University Park, adopted LibCal to schedule Media Commons resources during Fall 2017 which has greatly increased the amount of usage data we are able to collect. We hope to bring more campuses online with LibCal in the coming semesters. Because of this, we were able to capture more usage data at the campuses than had been previously possible in earlier semesters.
- Utilization of Media Commons services during the fall semester has increased by 17% over the last five years. This jump can largely be explained by the increase in class partnerships across several disciplines and improved data collection methods.

# of People Helped in last 5 Fall Semesters
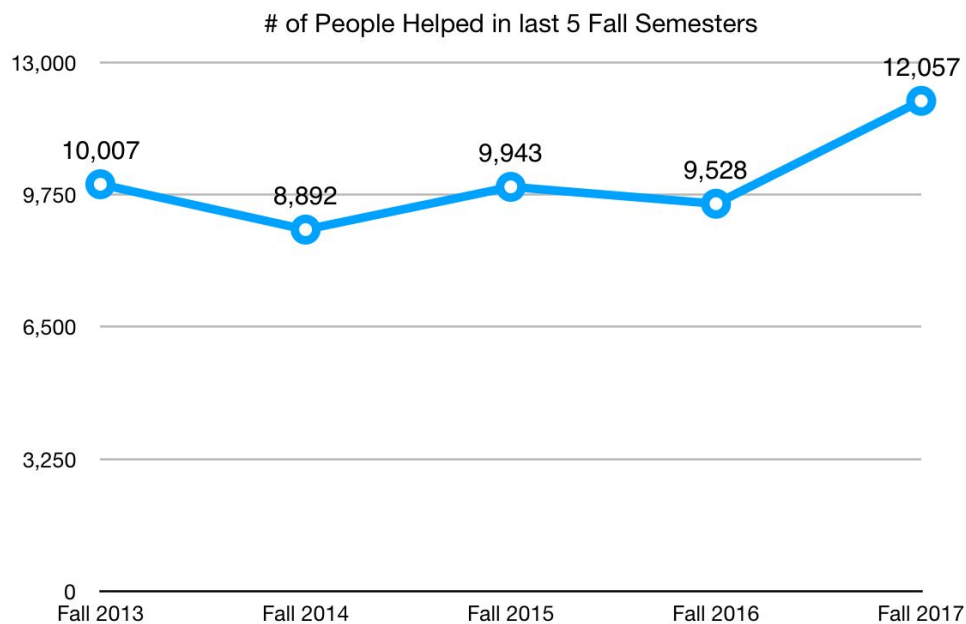
First Semester for New MC Website

Fall 2017 was the first full semester during which students, faculty and staff were able to make use of the completely overhauled Media Commons website, completed and launched at the end of Spring 2017. During that time:

- The number of unique visitors **increased by 85%**, up from 28,658 to 52,895 as compared to the previous Fall term.

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- Pageviews experienced a more **modest 33% increase** despite the bump in traffic, going from 89,420 to 119,573 year over year.
- The above - and the rating of **1.89 pages per session** - point to greater ease of finding information with the new design.
- The **Free Media Library** continues to be the most popular section of the website (11,521 visits) followed very closely by the University Park appointment request form (6,044) and location page (3,938) and the Students page (2,914).
- Interestingly, many of the specific sub-topic tutorials are now ranking as **top 10 content**: Exporting an MP3 and Fades/Volume Adjustment in GarageBand with 14,034 and 5,582 visits respectively as well as Adding Sound Effects in iMovie with 2,875. This points to the very strong possibility of much higher search result placement for non-University visitors.

Challenges & Opportunities

- The Penn State/Adobe Creative Cloud partnership was launched during the Fall 2017 semester giving all students and faculty free access to professional multimedia applications. Media Commons is looking closely at how this could affect the Media Commons service model that typically relies on students needing to use Media Commons-provided iMacs for access to specialized software. Broader access could open a number of new support opportunities.
- We were unexpectedly delayed in replacing Kristen McAuley's Media Commons position during the Fall 2017 semester. This led us to be understaffed during the entire semester at University Park. UP staff exceeded expectations in supporting the demand of what turned out to be our busiest semester to date despite this limitation.
- We have begun evaluating options for refreshing the 3D printers operated in the Maker Commons. This includes evaluating new hardware from multiple companies as well as new management software for receiving, assigning, and maintaining remote print submissions. This evaluation will continue through Spring 2018.
- Despite not officially launching until January 2018, the Immersive Experiences Lab continues to work with several classes at UP and the campuses interested in exploring 360° video.
- The ENGL 15 podcast assignment at UP created demand that exceeded capacity at the UP Media Commons facilities during Fall 2017. We met with ENGL 15 instructors to collaboratively redesign the assignment to provide students a better experience and more efficiently make use of resources. This assignment is typically completed by 77 sections of ENGL 15, comprising approximately 1,600 students.