## Summary

Fall 2024 saw 14,417 students, faculty, and staff use the Media Commons, Maker Commons, and Immersive Experiences Lab initiatives across the Commonwealth. Much of this use was focused in 360 classes in nearly every discipline offered at Penn State. To facilitate these interactions outside of University Park, traveling consultants provided 34 in-person sessions and 41 remote sessions for instruction, consultations and support.

One Button Studio 2.0 helped students and faculty create **5,814 academic videos**, comprising over **192 hours of video**. In addition, students from across the Commonwealth created **4,938 3D prints** in pursuit of their course work and their own curiosity.

The **Interactive Experiences** team facilitated experiences across 5 colleges. The team currently offers four main experiences: virtual reality, augmented reality, a cooperative, discussion-based card game called IMPACT that focuses on empathy, diversity, and technology as well as generative AI tools.

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 also point out usage and technology trends that draw from the Creative Learning Initiatives group's proven history in supporting multimedia and emerging technology as well as reflect on challenges and opportunities in the coming semesters.

## People Helped

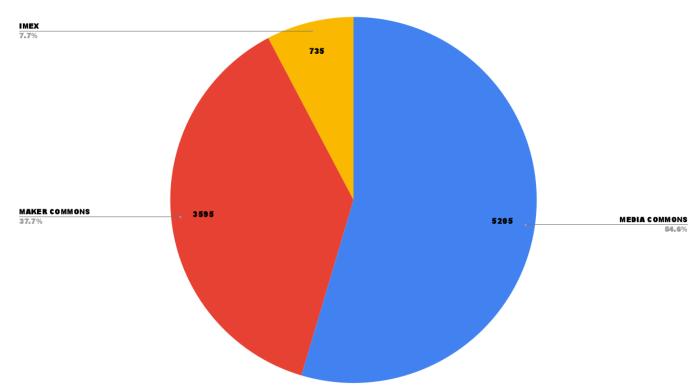
Faculty and students used Media Commons, Immersive Experiences Lab and Maker Commons services in a variety of ways in all of our locations over the course of the semester. These charts count how many people were aided by our consultants in either 1-on-1 consultations or in-class workshops.

Media Commons @ University Park	# of People Helped
Pattee Library Knowledge Commons	1,056
Shields Building	111
PAMS Library, Davey Lab	98
Immersive Experiences Lab, Agricultural Sciences & Industries Building	66

Media Commons Workshops	4,378
Maker Commons Workshops and 3D Printing Users	3,290
Immersive Experiences (IMEX) Workshops	536
Media Commons Events	2,678
University Park Total	12,213

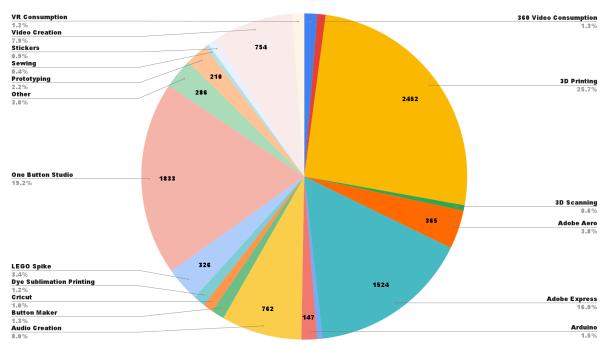
# University Park Breakdown by Service (Excluding Events)

#### **UP NUMBER OF PEOPLE HELPED BY MC SERVICE FALL 2024**



# University Park Technology Breakdown (Excluding Events)

#### UP TOTAL NUMBER OF PEOPLE ASSISTED PER TECHNOLOGY FALL 2024



Technology Name	# of People Helped	Technology Name	# of People Helped
360 Video			
Consumption	123	Cricut	96
360 Video Creation	78	Dye Sublimation Printing	113
3D Printing	2,452	LEGO Spike	326
3D Scanning	53	One Button Studio	1,833
Adobe Aero	365	Other	286
Adobe Express	1,524	Prototyping	210
Adobe InDesign	52	Sewing	40
Arduino	147	Stickers	83
Audio Creation	762	Video Creation	754
Button Maker	122	VR Consumption	116
		TOTAL	9,535

- Ann Holt's ART 100 class collaborated with Media Commons on the "Getting Lost: Mapping Surroundings" first year seminar experience. Staff guided students through a Sphero Bolt robotics session, where they learned block coding to program and control their robots. Once they mastered the basics, the students created a large map using recycled paper spread across the floor in the C-PAD Teaching Lab. Dipped in different colors of ink, the robots mapped out pathways to represent the routes the students navigate daily in a hands-on exploration of their surroundings.
- In addition to the Sphero Bolt activity, Ann Holt also had her ART 100 students experiment with immersive technology by exploring 360° video. The class was introduced to 360° storytelling and asked to come into the IMEX Lab to choose a video to watch from the 'VR For Good' playlist. With the techniques and topics they each viewed in mind, the students were then tasked with creating their own. The theme was 'things First Year Students should know' and the students worked in groups to create these experiences. This culminated in a 'viewing party' during the last week of classes where the students were able to watch everyone's videos in the headset.

## 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

Campus	# of Penn Staters Helped	# of Classes	Events	In-Person Visits*	Remote Sessions <sup>†</sup>
Altoona	205	5	-	2	8
Beaver	344	12	1	6	5
Behrend	-	-	-	-	-
DuBois	-	-	-	-	-
Fayette	24	-	1	2	-
Greater Allegheny	159	8	2	5	6
Harrisburg	62	1	1	1	1
Mont Alto	62	4	-	-	1

New Kensington	170	3	2	4	1
Pittsburgh Center	18	1	-	1	2
Shenango	-	-	-	-	-
Totals	1,053	34	7	21	24

<sup>\*</sup> In-Person 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.

- Ashu Kumar asked his IST 110 students at Beaver to collaborate with chat-based artificial intelligence to develop and document new board games created by mashing together rules and elements of existing favorites. 24 students participated in groups of four or five to design gameplay and boards, select appropriate game pieces and elements and then play tested each others' creations, offering constructive feedback and reflection. Students uploaded their finished games and Al-created summaries to Padlet. This was the first use of the Can Al Play? Dreamery experience activity outside of University Park and proves that the workshop can travel.
- The <u>Lambert Undergraduate Advising Center</u> at Penn State Harrisburg worked with the campus <u>Center for Teaching Excellence</u> to offer VirtualSpeech training as professional development to its staff on September 17. Participants used CTE-provided headsets with TLT's <u>Soft Skills Pilot</u> accounts to explore a variety of speaking scenarios, many of which included AI generated dialog. Participants filled out a brief questionnaire after the experience and shared that: "I found it to work well in responding based on what I just said. It also was very helpful to hear a summary of my strengths and weaknesses in the scenario.", "It was difficult to get used to at first, but once I was comfortable, it was a useful tool." and "The information I learned has changed my interactions with students."

## Eastern Campuses

Campus	# of Penn Staters Helped	# of Classes	Events	In-Person Visits*	Remote Sessions <sup>†</sup>
Abington	27	2	1	2	2
Berks	837	3	1	2	2
Brandywine	126	6	2	5	2

<sup>&</sup>lt;sup>†</sup>Remote Sessions denote online teaching workshops, faculty consultations, meeting with students, critiques of project materials uploaded to Canvas, OneDrive, etc

Great Valley	8	1	-	1	-
Hazleton	29	3	-	2	-
Lehigh Valley	1	-	-	-	-
Schuylkill	33	2	1	1	4
Scranton	20	1	-	-	1
Wilkes-Barre	33	1	-	-	5
York	37	-	-	-	1
Totals	1,151	19	5	13	17

<sup>\*</sup> In-Person 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.

- In October, Media Commons and the Thun Library at Berks hosted an Immersive Technology Day. The event was organized by Library Services Specialist, Annamarie Given and Instructional Designer, Glenn Kuntz. The participants were encouraged to put on a Meta Quest headset and immerse themselves in virtual reality apps for everything from meditation to chemistry - and explore different environments through 360° videos. The event was attended by students, faculty and staff.
  - In addition to availability through pilots, several Meta Quest 2 headsets joined the Berks Media Commons inventory permanently later this Fall.
- At Penn State Hazleton, students in Karen Stylianides KINES 024, Lifetime Sports, class
  were transported to golf courses in Scotland, California, and Florida. The students
  participated in the Media Commons Virtual Headset Pilot and used the Golf+ application to
  work on their golf game on Meta Quest 3 headsets. The students will use this and similar
  applications for future classes, including a lifeguarding course developed by The American
  Red Cross.

## 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 = MeC, Maker Commons = MaC, Immersive Experiences Lab = IMEX

<sup>&</sup>lt;sup>†</sup>Remote Sessions denote online teaching workshops, faculty consultations, meeting with students, critiques of project materials uploaded to Canvas, OneDrive, etc

	Ur	niver	sity Pa	rk	Wes	stern (	Campu	ses	Eas	tern (	Campu	ses	
Colleges	MeC I	MaC	IMEX	Total	MeC	MaC	IMEX	Total	MeC	MaC	IMEX	Total	Grand Totals
Agricultural Sciences	1	-	-	1	-	-	-	-	-	-	-	-	1
Arts & Architecture	3	8	12	23	1	-	-	-	1	1	-	1	24
Business	2	-	2	4	-	-	-	•	4	ı	-	4	8
Communications	6	1	2	9	2	-	-	2	5	1	-	5	16
Earth & Mineral Sciences	3	-	-	3	-	-	-	-	-	-	-	-	3
Education	-	21	7	28	ı	-	-	-	1	-	-	1	29
Engineering	1	31	-	32	-	3	1	4	-	-	-	-	36
Health & Human Development	10	-	-	10	4	-	-	4	2	-	2	4	18
Information Sciences & Technology	-	6	-	6	6	4	3	13	1	-	-	1	20
Liberal Arts	150	17	-	167	7	2	-	9	-	-	1	1	177
Medicine	-	-	-	-	-	-	-	-	-	-	-	-	-
Nursing	-	-	-	-	1	4	-	4	1	1	-	-	4
Sciences	4	3	-	7	-	-	-	-	1	1	1	2	9
Graduate	-	-	-	-	-	-	-	-	1	-	-	1	1
Teaching and Learning with Technology	-	1	-	1	-	-	-	-	-	-	-	•	1
World Campus	-	-	-	-	-	-	-	-	-	-	-	•	-
Outreach	-	1	-	1	-	-	-	-	-	-	-	-	1
LaunchBox	-	1	-	1	-	-	-	-	-	-	-	-	1
University Libraries	3	-	-	3	-	5	-	5	-	-	-	-	8
Undergraduate Studies	-	-	-	•	1	-	2	3	-	-	-	-	3
Totals	183	90	23	296	20	18	6	44	15	1	4	20	360

The University Libraries open houses featured TLT visits to Fayette, Greater Allegheny and New Kensington September 4, September 16-17 and September 23+26, respectively. At Fayette, TLT partnered with landscape contracting lead, Margaret Hoffman for a faculty session entitled "Leveraging Immersive Experiences in Place Based Education." Ten faculty were joined by campus instructional design in a lively conversation about potential uses in varied course settings. The theme at Greater Allegheny was "backstage pass" where TLT demoed Meta Quest 3 headsets as the "Virtual Insanity" stop on the set list portion or the event. Over 45 students stopped by the room, several repeat customers returning on day two to beat their high scores or practice a new meditation. For New Kensington, headsets leveraged 360° video to have students visit Haiti, the 2024-2025 country of focus, and then reflect on what they learned. Over 120 students attended the two day event, all of whom learned about the availability of immersive resources on their campus.

- Media Commons has begun rolling out <u>Cricut Maker printers</u> to **Penn State Berks** and **Penn State Brandywine**. At **Berks**, the Cricut is available in the campus Maker Space, which is supported by an intern, highlighted <u>here</u>. Students can use the space for both academic and personal projects, with increasing interest from clubs and classes. At **Brandywine**, faculty are eager to incorporate the technology into classes and use the tech for campus-wide projects.
- Media Commons staff partnered with Stuart Selber, department head, and Stan Kranc, associate teaching professor in the English to revamp the curriculum for ENGL 015. This collaboration involved reimagining and redesigning the Infographics with Adobe Express workshop to align with the updated requirements for all 300 of the course's sections. Enhancements included: the integration of generative AI, charts and graphs, as well as elevating the overall content quality and visual appeal.

Staff taught 58 Adobe Express workshops, which were attended by 1,509 people. The project also required the creation of several video tutorials of which the topics and views are broken down below:

- o Branding 55
- o Color Palette 49
- Text to Image 44
- o Content Blocking 91
- o Charts 234
- o Info Tutorial full workshop 212
- The Huck Institutes of the Life Sciences hosted a session on generative AI organized by Media Commons at the request of Dr. Donna Korzik. The event brought together over 100 graduate students and faculty members at the <u>Innovation Hub</u>. Working in small groups, participants designed logos for their National Institute of Health training groups using Adobe Express.

Each team competed in a design competition as the event drew to a close. Attendees were asked to vote on their favorite creations, adding a chance to "win" while expanding everyone's knowledge of generative AI tools.

# Interactive Experiences

## **Dreamery Experiences**

The Interactive Experiences team facilitated 23 experiences across 5 colleges impacting 684 students. The team currently offers four main experiences: Reality Remix, AI Artist Lab, Can AI Play? and a cooperative, discussion-based card game called IMPACT that focuses on empathy, diversity, and technology. You can find description on these experiences on the TLT website at: https://tlt.psu.edu/learning-spaces/the-dreamery/

Colleges			D	reame	ry Experiences
	RR	AIL	CAP	IMP	Total
Agricultural Sciences	-	-	-	-	-
Arts & Architecture	-	-	-	-	-
Business	-	-	-	-	-
Communications	2	2	2	3	9
Earth & Mineral Sciences	-	-	-	-	-
Education	-	2	-	-	2
Engineering	-	-	-	-	-
Health & Human Development	-	-	-	-	-
Information Sciences & Technology	-	1	1	1	3
Liberal Arts	4	-	2	-	6
Medicine	-	-	-	-	-
Nursing	-	-	-	-	-
Sciences	-	2	-	1	3
Events	_	-	-		-
Totals	6	7	5	5	23

 The Interactive Experiences team has launched three new hands-on learning experiences for the Fall 2024 semester. These experiences are now live and <u>available</u> <u>for booking</u> and we've already seen significant interest from faculty across multiple disciplines.

Our new offerings include:

- Can Al Play?
- Al Artist Lab
- o Reality Remix: Hands-On Encounters in XR

These experiences are designed to immerse students and faculty in emerging technologies, encouraging creative exploration and learning in new ways. Interactive Experiences has already seen some fantastic student projects and the feedback so far has been overwhelmingly positive.

• With over 830 members, <u>Al Horizons</u> continues to foster thought-provoking discussions and collaborative exploration of Al's impact on teaching and learning.

Across four engaging sessions this Fall, the community saw strong participation,

peaking at 139 attendees in October. The series featured expert insights, including Dr. Ben Lear's take on using ChatGPT 4.0 to teach data visualization, the Ai Assignment Icon Project from the Smeal College of Business, and the new director of the AI Hub, Dr. Mehrdad Mahdavi's discussion on AI's dual-edge innovations and risks. The semester wrapped up with Sarah Viner from LinkedIn Learning, who explored AI's integration into professional development.

Recordings of past sessions, along with additional resources, are now available on TLT's new AI website.

## One Button Studio

Media Commons supports the One Button Studio project across campuses and students in remote locations. The One Button Studio allows students and faculty to simply create quality academic videos, often for recording presentations, lectures, and demonstrations, or completing class assignments - both in-person and via best practices to apply at home via Zoom.

### In-Person

Location	# of Videos Created	Total Duration of Videos Hours:Minutes:Seconds
Pattee Library Knowledge Commons (2 studios)	2,017	84:39:30
Shields Building (1 studio)	468	25:24:09
PAMS Library, Davey Lab	415	16:49:57
University Park Total	2,900	126:53:36
Abington	Decommissioned	Decommissioned
Altoona	207	3:26:11
Beaver	548	6:58:46
Behrend	4	0:01:34
Berks	No Report	No Report
Brandywine	465	13:01:35
DuBois	37	1:17:13
Fayette	59	2:29:58
Great Valley	87	0:55:13

Greater Allegheny	99	0:31:36
Harrisburg	179	4:32:30
Hazleton	17	0:07:04
Lehigh Valley	138	5:39:24
Mont Alto	59	0:47:52
New Kensington	No Report	No Report
Penn State Center	No Report	No Report
Schuylkill	65	2:19:17
Scranton	678	17:40:50
Shenango	6	0:00:22
Wilkes-Barre	0	0:00:00
York	266	5:27:56
Commonwealth Total	2,914	65:17:21
Total One Button Studio Use	5,814	192:10:57

Media Commons staff piloted an updated workshop for THEA 1S taught by **Ronda Craig** and **Elizabeth Bonjean**, The first year seminar session challenged students to create a one-minute production based on the theme **"We Are."** 56 students were divided into groups and assigned production types based on their preparation time:

- **Improv**: The first two groups created on-the-spot performances.
- Interview: The second two groups conducted themed interviews.
- **Scene**: The final group performed a scripted scene.

This structure worked well, ensuring students stayed engaged while waiting for their turn in the OBS studio. The collaborative and creative atmosphere made the session a success, with students thoroughly enjoying the experience.

## Maker Technologies

The Maker Commons offers students at University Park, the Commonwealth Campuses, and World Campus access to 30 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.

Registered 3D Printing Projects	40
Registered 3D Printing Project Students	1,930
Hours of Print Time Registered and Personal 3D Printing	17,342
Successful Prints	4,938
Filament Used	231kg (48 miles)

#### **Featured Stories**

Anna Divinsky in Arts and Architecture partnered with Maker Commons to plan and
host a creative making event in the <u>C-PAD Teaching Lab</u>. Staff collaborated with
students, faculty and attendees to create unique fabric-inspired imagery using **Adobe**Firefly during the space's open house. These designs were then printed using a dye
sublimation printer and participants transferred their creations onto square magnets. The
magnets were arranged on a whiteboard, forming a collaborative quilt composed of
individual patterns based on participants' ethnologies.

### Websites and Social Media

Notably, almost every single percentage in this section is the same as in the Spring report, continuing a trend for this new academic year very neatly from the previous. Site traffic is down across the board which could point to more reliance on in-person assistance and just-in-time hotline-based support (phone, chat, email) as well as an overall degradation in the efficacy of web search. The nearly equal (year over year) viewership of PSA and Free Media Library content on the Media Commons site also points to a return to traditional, complex video assignments in many classes that had shifted to lighter, online-friendly tools like Adobe Express. 3D printing resources continue to be popular at Maker Commons, which is also born out in strong filament use numbers above.

- The number of unique visitors was 39,553 across all three services:
  - 29,089 via Media Commons (-43%)
    - 8,166 in Pennsylvania
  - 3,618 via IMEX Lab (-21%)
    - 380 in Pennsylvania
  - 6,846 via Maker Commons (-34%)
    - 3,820 in Pennsylvania
- The pageviews for Media Commons reached **62,394**, **representing 1.1 pages per visit**. Popular content included:
  - Free Media Library (11% total views)
  - Public Service Announcement (5%)
  - Workshops (3%)
- The pageviews for IMEX Lab reached 6,152, representing 1.8 pages per visit. Popular content included:
  - Immersive Storyboarding (3% total views)
  - VR Experiences (3%)
  - Experience Catalog (3%)
- The pageviews for Maker Commons reached **56,541 representing 7.5 pages per visit.** Popular content included:
  - o **3D Printing** (15% total views)
  - Information to 3D Print (13%)
  - University 3D Printing Policy (10%)

A renewed effort to engage with our various audiences through social media channels continues. Notable trends from Fall semester include:

- Instagram audience is up 8.8% year over year and reach is up 106%
- Facebook **reach is down 67%** year over year
- LinkedIn **organic engagement rate is 15%** (in general *1-3%* is a sought after rate)

# Challenges, Opportunities & Notable Trends

Looking at some of our key performance indicators when compared to 1, 2, 5 and 10 years ago will help us identify areas of growth and change. There is an ebb and flow to each semester, but by analyzing in this way we will be better able to identify trends worthy of further investment or of reassigning resources. The percentages compare Fall 2024 to previous years and demonstrate growth or contraction on specific areas of the services.

KPI	Fall 2024	1 Year Ago 2023	2 Years Ago 2022	5 Years Ago 2019	10 Years Ago 2014
Overall People Helped	14,417	10,546 +27%	10,404 +27%	12,576 +13%	8,892 +38%
University Park Partnered Courses	296	235 +20%	243 +18%	212 +28%	112 +62%
Commonwealth Campuses Partnered Courses	64	64 +0%	72 -11%	77 -17%	37 +42%
One Button Studio Videos	5,814	6,238 -7%	6,961 -16%	10,351 -44%	2,773 +52%
Successful 3D Prints	4,938	6,719 - <b>26</b> %	4,894 +1%	4,228 +14%	-
Partnered Courses Using Immersive Tech	33	43 -23%	28 +15%	22 +33%	-