

OFFICE OF INFORMATION TECHNOLOGY

# 2026

# Annual REPORT



- 📞 860.832.1720
- ✉️ [techsupport@ccsu.edu](mailto:techsupport@ccsu.edu)
- 📍 Technology Support Center  
Library, 3<sup>rd</sup> Floor

# In this Issue

<i>Article</i>	<i>Page</i>
Message from the VP	2
IT by the Numbers	3
Ellucian Banner ERP	5
Artificial Intelligence	7
Technology Enhancements	9
Learning Commons	11
The HUB	12
XR Lab	13
Faculty Spotlight	15
Student Partnerships	17
Meet the IT Staff	18

## Information Technology Leadership

George F. Claffey Jr. Ed.D.  
VP for Technology & Strategic Initiatives

Thomas King  
Director of Aux Services & Cloud Infrastructure

Amy Kullgren  
Retired, Director of Client Support Services

Sean McNickle  
Chief Information Security Officer, Deputy CIO

Sam Nanayakkara  
Deputy CIO, Enterprise Systems

Rob Rak  
Director of Administrative Technology Services

Tina Rivera  
Interim Director of Client Support Services

Stan Styrzula  
Director of IT Strategic Initiatives

Terry Thompson  
Executive Assistant to the CIO

## Center for Teaching & Innovation (CTI)

John Tully  
Interim Associate VP for Academic Affairs

## Faculty Senate Information Technology Committee (ITC) Leadership

Kimberly Meyer, Chair  
Criminology and Criminal Justice

Sharon Clapp, Vice Chair  
Library

## IT Annual Report Editor

Tina Rivera

Printed by the Central Copy Center

## Cover Design and Image

Cover Design by Bridget Reddington  
Cover Image: Interim AVP and History Professor John Tully teaching a hybrid hyflex class in the new Hyflex 2.0 Proscenium Room in the Library.

## Message from the Vice President for Technology & Strategic Initiatives



As in years past, this has been a fast-moving and productive year for our division and for the university as a whole. While there were many important milestones, none was more significant than the launch of the Banner SaaS project.

Ellucian Banner SaaS (Software as a Service) is the next evolution of the enterprise system Central has relied on since 1999. After 26 years of dependable service, countless upgrades, server migrations, testing cycles, and patches, the time has come to transition to a fully cloud-based SaaS platform. While this change is technical in nature, its impact is far-reaching: it positions the university for greater resilience, improved supportability, and a more modern enterprise environment for years to come.

I would be remiss if I did not recognize the exceptional work of the university's Application Coordinating Team (ACT). Originally formed in 1998 as the "Banner Team," this dedicated group has been meeting regularly for nearly three decades to ensure that key campus functions, from admissions and registration to financial aid, institutional research, finance, and the business office remain aligned and operational through every major system change. When late-night or weekend system upgrades occur, it is frequently members of this team who are logging in, testing code, validating processes, and confirming that systems are ready so the rest of campus can begin work Monday morning without disruption. Much of the success of the Banner SaaS initiative will rest on their experience, commitment, and careful attention to detail. Over the next 15 months, ACT will continue testing, refining, and adjusting the new environment to help ensure the strongest possible implementation and go-live.

This year also brought important organizational growth to our division. Career and Professional Development, Professional Education, and the Central Workforce and Innovation Hub joined our portfolio under the university's expanded "Strategic Initiatives" umbrella. We are excited to welcome these colleagues to our team and to support the growth of this broader division. Their addition reflects the university's increasing focus on preparing students and incumbent workers for a rapidly changing economy. These efforts are a natural fit with our mission and our growing role in experiential learning, workforce development, and applied research. We expect to share exciting announcements in the coming year that will help serve as a launch pad for the university's next phase of growth.

Finally, this year's report includes a new feature: Faculty Spotlight. This section highlights faculty work that brings together technology, teaching, learning, and innovation across campus. We know there are many outstanding stories underway, and we would welcome the opportunity to help share them. Thank you for all you do to support our students, our campus, and our shared mission.

George F. Claffey Jr. Ed.D.  
Vice President for Technology & Strategic Initiatives

# By the Numbers

## Technology Support Center



**16,845**

Technical Support Incident Tickets Logged



**5,593**

Service Request Tickets Processed



**912**

Walk-In



**5,042**

Email



**9,952**

Phone



**633**

Voicemail



**289**

After Hours  
Blackboard/Anthology

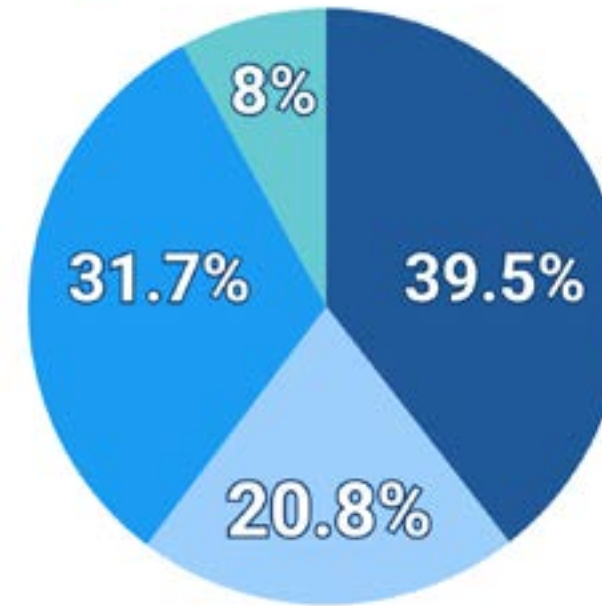


**17**

Chat

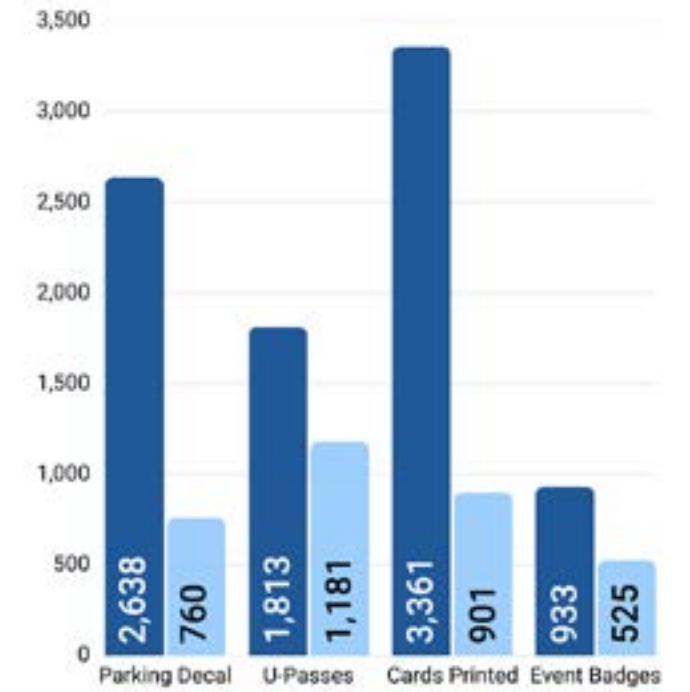
## Computer Allocation

- Student Loaners (493)
- Classroom Upgrades (396)
- Replacement Computers - Faculty/Staff (100)
- New Computers - Faculty/Staff (260)



## Card Office Stats

- Fall 2025
- Spring 2026



## SOCIAL MEDIA PERFORMANCE REPORT 2026

ccsu\_it

April 2025 – March 2026

Total Impressions

**264K+**

Total Engagement

**6,024**

Total Followers

**933**



**14,622**



Most Views



**312**



Most Shares

# Ellucian Banner ERP in the SaaS Environment: A Platform for the Future

Central's move to the Ellucian Banner SaaS platform opens new possibilities for the University. This upgrade will help improve digital services, simplify operations, and keep Central ready for future needs.

## Why Banner Must Evolve

Central is facing several big changes at once, making it important to improve how the university uses technology:

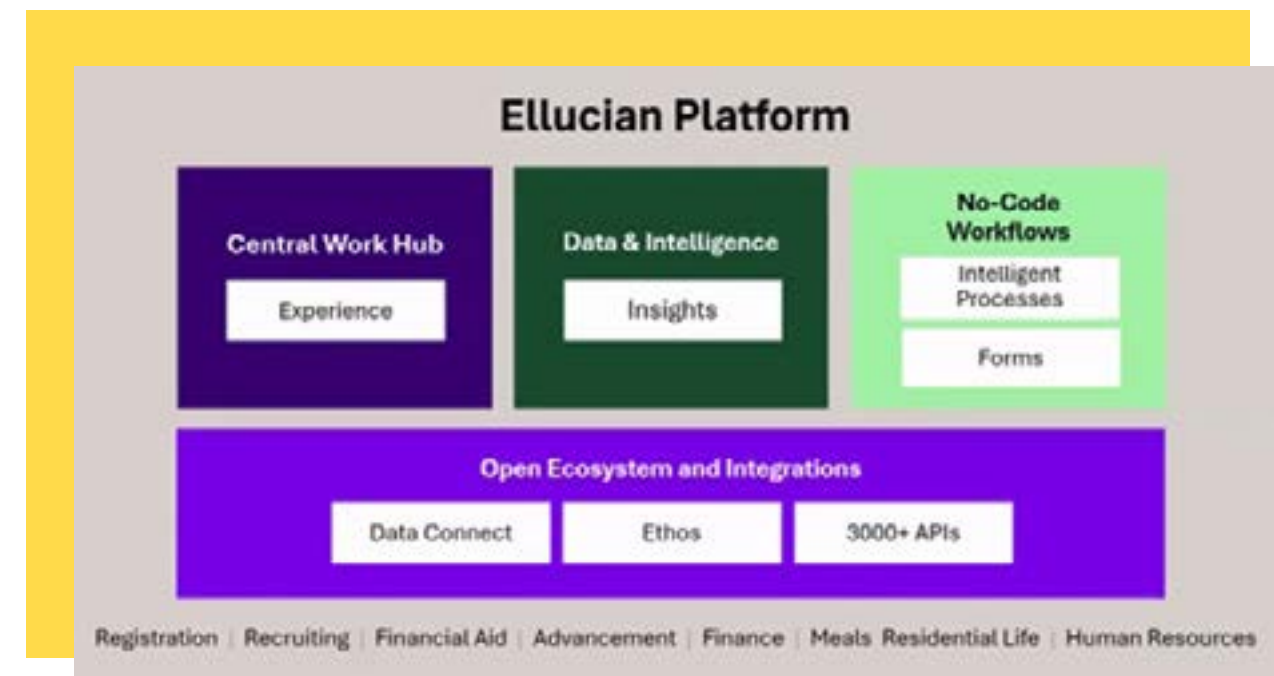
- Students increasingly expect seamless, mobile-first digital experiences that perform reliably across both high- and low-bandwidth environments.
- Federal and state requirements demand more agile approaches to data governance, privacy, and accessibility compliance.
- The academic environment continues to grow in complexity, driven by interdisciplinary programs, modular credentialing, and expanded year-round offerings.
- Institutional leadership requires timely, data-driven insights to support informed strategic decision-making.

Together, these factors underscore the need for a modern, flexible, and resilient IT ecosystem that can effectively support Central's evolving mission.

To position Central for future demands, a major modernization initiative was launched in the Fall 2025 to transition the Ellucian Banner ERP and its associated integrations to a Software as a Service (SaaS) model. While Banner has been hosted in the cloud since 2018, this shift represents a fundamental change in how the system is delivered and managed. Under the SaaS model, Ellucian will no longer support locally developed customizations, and direct institutional access to the underlying database will be removed. This transition requires a strategic shift toward standardized configurations, vendor-supported extensions, and new approaches to data access and integration.

As part of this transition, the underlying database platform will shift from Oracle to PostgreSQL. This change necessitates a comprehensive review of all active integrations, reports, and custom code to determine whether each should be converted, redesigned, modified, or retired. Moving forward, Ellucian Ethos will serve as the primary integration framework, guiding the redevelopment of system interfaces and data exchanges. By moving away from direct database scripting for data changes, Central has an opportunity to rethink and enhance its business processes, allowing us to modernize and improve efficiency. This shift encourages a move away from custom-developed solutions and toward greater use of baseline Banner functionality, enabling the us to take full advantage of standardized, efficient processes and workflows available within the core system.

Finally, this initiative represents a significant investment in a modern student experience. Today's learners expect systems that are accessible 24/7, mobile-friendly, and intuitive across devices, including phones, tablets, and emerging technologies. The Ellucian SaaS model supports this level of flexibility and access, which is essential for advancing equity, inclusion, and student empowerment.



With the entire Connecticut State College and University System standardizing on the SaaS environment, users will be empowered to take ownership of their technology experience, and future upgrades should be more seamless without the need to account for localized custom code.

## Project Timeline

The project is expected to take approximately eighteen months, with a targeted go-live date of June 2027.



# From Concept to Campus: Advancements in Artificial Intelligence at Central

## The Unitree G1 in Teaching and Research

Shortly before the start of the Spring 2026 semester, the University acquired a Unitree G1 robot. The G1 is a humanoid robot that is about the size of a child. It stands approximately 52 inches tall, weighs almost 80 pounds, and has 43 degrees of freedom of movement across its joints (Unitree, 2026). This level of freedom lets the robot move and perform tasks like a human. This will allow for research into the industrial applications of humanoid robots.

The G1 expands the University's investment in robotics as it is significantly more advanced than the Go2 robot, which was acquired in 2024. Both the Go2 and G1 utilize the same development environment. They use ROS2 (robotic operating system 2) and a Unitree SDK (software development kit) for the C and Python languages. This shared platform allows faculty and students to transition the skills learned on the Go2 to the G1.

The versions of the robots that University purchased are for use in education and research and have been used for academic works, including training the G1 to perform human-like motion (<https://arxiv.org/pdf/2502.01143>). Both the G1 and Go2 have attached Nvidia Jetson computers used for secondary development and enhanced Lidar for improved navigation. The G1 has two sets of hands, a mannequin set for demonstration, and the Inspire dexterous hands which are used for manipulations. These hands have six degrees of freedom and twelve joints, which mirrors that of human hands.

With the addition of the G1, the University is well positioned to educate our students in the combined areas of AI and robotics. This is an area of development that will likely see a large amount of growth over the next several years as both humanoid and non-humanoid, autonomous, AI powered robots are integrated into manufacturing, logistics, and supply chains.



## campusGenAI: An AI Garden

In the 2025-2026 academic year, Information Technology successfully piloted campusGenAI. This is an artificial intelligence garden that allows users to access multiple models through a single interface for a manageable cost. It does this by providing the user with a credit consisting of tokens (units of data processed by the model). Once the tokens are depleted the service cannot be used until they are replenished, which happens automatically. This product allows students and faculty of all backgrounds to have access to innovative AI models. It is currently in the pilot phase for the Spring semester with plans to roll it out campus-wide for the Fall 2026 semester.

CampusGenAI includes models from six different companies including OpenAI, Anthropic, and Meta. The platform provides access to ten different models such as GPT-5, GPT-5 Codex, LLaMa 3 70b Instruct, and Claude 4.5 Sonnet. Some models are just for chat while others can generate images. The plethora of vendors and models provide both students and faculty with choices when working on projects or research. They will not be constricted to one model's "point of view" and can easily experiment to see the different results from the various models in the garden.

In addition to the models, campusGenAI allows for the creation of simple AI Agents. While there are various definitions of what an AI Agent is, Amazon Web Services (AWS) defines it as "an artificial intelligence (AI) agent is a software program that can interact with its environment, collect data, and use that data to perform self-directed tasks that meet predetermined goals."<sup>1</sup>

While these agents may be simple, they are still feature rich. After selecting a model for an agent, users have access to control the limit on the number of tokens used by



the model, how random or deterministic the results are, how tokens are selected, how large of a budget the model has for "thinking", and how many tokens can be used when searching files. Minor changes in any of these settings can result in substantial change in the outcome.

Users can attach files to the agent to provide more context for answers, thereby creating a basic retrieval augmented application (RAG). Agents can access third-party tools such as Google, OpenAI Image Tools, or Wolfram. The user would need to provide their own accounts, but these tools can be incorporated in the agent. Finally, multiple agents can be chained together to perform even more complex tasks.

In addition to these capabilities, there are several improvements planned for the near future. These include the creation of agent templates, filtering on agents in the agent center, document generation via agents including PDF, DOCX, and CSV, and grouping of tool calls to allow for clearer step-by-step transparency. With the introduction of the AI garden, faculty now can bring AI into the classroom on a level playing field. Students no longer need to have their own AI. The professor can standardize on the models used and how to use them.

<sup>1</sup> (What Are AI Agents? - Agents in Artificial Intelligence Explained - AWS, 2026)

# Technology Enhancements: Supporting Teaching, Learning, and Operations

## Building Speed, Security, and Scale into Our Campus Network

During the 2025-2026 academic year, the Information Technology Division made significant changes to the network to improve bandwidth, add capacity, and increase our network's fault tolerance.

The first improvement updated the connections from the core of our network to the firewall. We replaced the 10 gigabit connections with 25 gigabit connections on the firewall. This change enabled all buildings, networks, and WiFi to pass more traffic through our broader firewall. The update was successful, so we took the next step of changing the routing for network traffic.

Currently, Central has two 10 gigabit connections to the Connecticut Education Network (CEN) Internet Service Provider (ISP), a primary and a failover, and only one was in use at a time. As a result of having the ability to push more traffic to the firewalls, we began routing, or splitting, the traffic between the two 10 gigabit uplinks at the same time. This has proven to be an advantageous design. Now, student network traffic, such as gaming and streaming, uses one 10 gigabit uplink, and teaching, learning,

research, and campus business offices use the other uplink, increasing access to the internet for everyone.

The final improvement we made to the campus internet was the addition of a second ISP. While CEN is a reliable partner and we have their connections entering campus on disparate paths, if they ever experienced a major outage, for any reason, the campus would be without internet. We partnered with Frontier to bring in a backup ISP for the campus. We have configured this network to become the primary connection if both CEN uplinks fail.

The University tests this failover on an annual basis, and internet services such as email, phones, WiFi, Banner, Blackboard, web browsing, and Microsoft Teams automatically restore, allowing the campus to continue functioning. We continue to look forward to serving the University's ever-increasing need for internet bandwidth so we can continue to fulfill our mission.

## An Update on Windows 11 and macOS Modern Desktop



To date, the Windows 11 upgrade project has migrated over 3,800 university devices, while the macOS Modern Desktop initiative has brought nearly 500 Apple systems to macOS 15 (Sequoia), strengthening the technology that faculty, staff, and students rely on every day through improved performance, reliability, and security. Together, these efforts have brought colleagues across all departments into a shared, campus-wide transformation, spanning the full range of tools and systems in use and positioning the university for future success in supporting teaching, research, and operations.

## Modernizing IT Service Management to Better Serve IT and Campus

Information Technology completed a significant modernization of our IT Service Management (ITSM) system, Ivanti. This project represents an important investment in the tools that support all faculty, staff, and students, and reflects our ongoing commitment to improving how IT services are delivered across campus.

The upgraded ITSM platform provides a modern, intuitive user experience that simplifies how users interact with IT. The refreshed interface streamlines common tasks, reduces training time, and helps users find what they need more quickly. A key outcome of the modernization is the integration of Service Requests, Knowledge, and Announcements into a single, intuitive portal. By bringing these elements together, the system makes it easier for faculty, staff, and students to access self help resources, submit requests, and receive timely updates, all in one place. This unified approach

supports faster resolution of issues and provides better access to information.

This was a collaborative initiative, involving team members from areas across IT, ensuring that the system redesign addressed real-world workflows, reduced silos, and better reflected how IT supports the university community day to day. This approach also strengthened knowledge sharing and improves workflow integration across IT areas. Improved knowledge management tools help IT staff capture and share institutional knowledge, supporting consistency and reducing duplicate effort.

Ultimately, this investment in modern IT service management strengthens the foundation of IT operations at the university. By improving efficiency, visibility, and overall user experience, the Ivanti modernization helps IT deliver reliable, responsive services that support teaching, learning, research, and daily operations across campus.

## Enhancing Operational Efficiency with Hyland OnBase

Central Connecticut State University continues to expand its use of the Hyland OnBase Document Imaging System to enhance operational efficiency and modernize business workflows across the institution. OnBase remains a critical platform for digitizing documents and automating processes in administrative operations.

Over the past year, the University successfully deployed several new workflows, including Internal Grant Applications, HR Hiring processes, IT policy exception requests, and a range of forms and workflows supporting the Registrar's Office, the CCSU Foundation, Finance, and Global Engagement. These implementations have reduced reliance on paper-based processes, accelerated approval cycles, and improved the overall user experience for faculty, staff, and administrators.

In addition, we emphasized creating more consistent and well-managed approaches to workflow design and document management to ensure that new implementations are secure, scalable, and aligned with the University's priorities.

Looking ahead, Central will continue to identify opportunities to expand OnBase capabilities, with a focus on integrating systems, enhancing data accessibility, and further streamlining cross-departmental processes.

# Inside the Learning Commons

It's no secret that Elihu Burritt Library is one of the main gathering spaces for students on campus. There's ample space for congregating, technology peppered about and there's even a Starbucks! It may not be well known, though, that the third floor is home to the Learning Commons.

What's the Learning Commons? It's a confluence of the Center for Teaching and Innovation, the Technology Support Center and Professional Education coming together for the betterment of our faculty, staff, and students.

CTI, led by Jennifer Nicoletti, is dedicated to supporting faculty in the development and delivery of online and hybrid courses and supports Blackboard Ultra for all courses. It offers a range of services, including workshops, one-on-one consultations, and resources on best practices. The Center also provides tools and technologies to help faculty create engaging and effective online learning experiences.



Formerly known as TechCentral, the Technology Support Center is a one-stop shop for all computer and technology needs on-campus. Outfitted with both a walk-in desk and a fully staffed office to cater to the University community's every technological need, the Technology Support Center is your go-to area for any tech questions or help you may require.

It also houses the Proscenium Room, one of the only learning spaces of its kind in the area. This state-of-the-art virtual learning space allows for students or learners of any discipline

to participate in a high-tech environment that brings the comfort of an in-person learning experience to your digital doorstep. The design enhances the classroom experience by integrating high-quality audio-visual systems, interactive displays, and collaborative tools that facilitate active learning and engagement. Instructors can interact in real time with 20 students in person and another 24 from all over the globe.

In addition to these offices, the Learning Commons has Bring Your Own Device stations, powered collaborative desks, and brand-new Alienware AI computers. In the stacks, you will find quiet meeting spaces as well as Macs and PCs available for use to anyone with a Central account. The combination of technology and the personnel to support it being in one place is a surefire way to make students successful with technology. At the Learning Commons, we're here to help.

# Central Workforce & Innovation Hub

The Central Workforce & Innovation Hub is committed to fostering meaningful engagement among students, faculty, and external collaborators through robust industry partnerships, applied research initiatives, experiential learning opportunities, and professional education. The Hub offers Central students access to internships, practical training, and career readiness programs, enabling them to gain valuable hands-on experience across sectors such as manufacturing, healthcare, finance, and insurance. Businesses are invited to collaborate with the Central Workforce & Innovation Hub for talent development, including customized training solutions for employees and new hires. Through these partnerships, industry leaders and employers benefit from a highly skilled and well-prepared workforce, equipped to meet the evolving demands of their respective fields.

In Summer 2025, Central Connecticut State University's Department of Chemistry and Biochemistry partnered with a local polymer company showcasing the significant benefits of academic-industry partnerships. Taking place in Dr. Sourav Chakraborty's lab, the project centered on creating a sophisticated analytical technique to detect and measure a range of compounds found in intricate industrial mixtures. By combining academic expertise in analytical chemistry with real-world industrial challenges, the team successfully designed a robust mass spectrometry-based approach that improved



precision and reproducibility. This partnership also offered valuable hands-on learning experiences for students, including a recent Central chemistry graduate who played an active role in the research and has since moved on to doctoral studies. Support from the university's Workforce and Innovation Hub, Academic Affairs, and Contract Compliance further strengthened communication and project execution. Overall, the project highlights how close collaboration between universities and industry can drive innovation, enhance workforce development, and deliver practical solutions to complex scientific problems.

In Fall 2025, Central partnered with the Connecticut Technical Education & Career System (CTECS) for a yearlong internship opportunity for one of Central's students. Luis Sebastian Sanchez is a senior at Central Connecticut State University majoring in Management Information Systems, with minors in Psychological Sciences and Applications of Artificial Intelligence. Through his internship, he is supporting CTECS by helping introduce and apply generative AI tools in ways that are practical and useful for day-to-day work.

*"My advice to future interns through Central's applied learning model is to take the experience seriously and treat it like more than just a requirement.... Technical skills matter, but what will really set you apart is your ability to learn quickly, work well with others, and turn ideas into action."*

*~ Luis Sebastian Sanchez, Central Senior, CTECS Intern*

# The XR Lab: A Catalyst for Innovation

The XR Lab's impact grew significantly during the 2025 - 2026 academic year. The Fall 2025 semester was particularly strong, far surpassing the initial goal of a 25% increase in engagement. Instead, the program achieved a 54% rise, reaching a total of 2,024 interactions. Monthly performance showed consistent upward momentum, beginning with a dramatic surge in August driven by summer programming and orientation training. Engagement continued to climb through September and October, the latter becoming the busiest month, and remained strong through November and December, reflecting sustained and expanding use across the campus community.

This growth was supported by new academic integrations, included presentation practice for Engineering Technical Writing and Presentation, implementing Spanish language labs in medical scenarios, and many implementations with First Year Experience classes. By November, the program had already met its original goal and set a stretch target of 2,000 interactions, which it successfully achieved by the end of the semester.

The XR Lab also played an important role in major campus events, highlighting its value as a venue for emerging technologies. During the 2025 AI Conference, the lab hosted pre-conference workshops focused on artificial intelligence in education. It also contributed to the CAEA Fall Conference by facilitating hands-on workshops in Gravity Sketch for educators. A notable milestone occurred in December when the lab supported its first live XR-based musical performance, showcasing the versatility of immersive technology beyond traditional classroom use. Lastly, the Connecticut Digital Humanities Conference hosted breakout sessions for attendees to discover how XR technology can facilitate interaction with digital artifacts and



gave an excellent opportunity for graduate student Jon Kozak to demonstrate his graduate capstone project documenting an industrial area's reclamation to a public park.

To support increased demand, the XR Lab implemented key operational upgrades. New headset straps with external batteries allowed for extended use during long sessions, particularly benefiting programs requiring hours of continuous engagement. Additional ergonomic straps helped reduce motion sickness, significantly improving accessibility for many students. Facility enhancements, including a display cabinet for student-created sculptures, added a visual and interactive element to the space, strengthening its role as both a learning and showcase environment.

Finally, the XR Program broadened its impact through new student initiatives, course implementations, and research projects. The creation of a Virtual Reality Club encouraged student involvement and exploration of XR technologies. Faculty across disciplines integrated XR into their teaching, using it for presentations, language practice, collaboration, and experiential

learning. Meanwhile, research efforts expanded with projects like the CyberCARED initiative, a mixed reality anesthesia training simulation, and a psychology study on meditation and skill acquisition. Together, these developments reinforce the XR Lab's growing importance as a center for innovation, education, and interdisciplinary research.



# Faculty Spotlight: Innovation in Action

## Craig M. Frederick: Transforming Traditional Art Instruction in the XR Lab

By offering a faster and more flexible approach to sculpting, the equipment, technology, and applications available in The XR Lab make it possible for sculpture students to transcend the limitations of reality and traditional media. Stunning results, typically requiring years for a student to develop the necessary design aptitude and weeks to months to complete using traditional media and tools, can now be achieved in a matter of hours to days. Empowering students to experiment with greater complexity and precision at an accelerated pace has transformed what was once a lengthy educational trajectory into one that advances students' sculptural understanding and sophistication at an unprecedented rate.

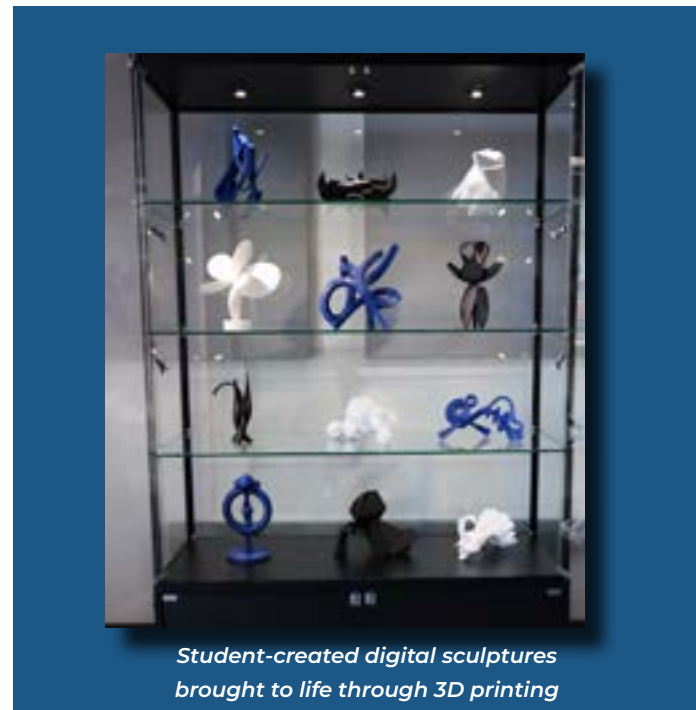
This became abundantly clear when I taught my first digital design students in the XR Lab two years ago. On their first day, I introduced a typical sculpture lesson about how two forms with different levels of resistance interact when pushed together. While the concept is easy to understand, applying it with real materials can take months or even years. Less than two minutes after the lesson, a student whose VR station was connected to the lab's jumbotron screen (a valuable teaching tool) asked aloud, "Is this what you mean, Professor Frederick?" As I turned to view the screen, I was stunned. In that moment, I realized that the education, development, casting, and large-scale fabrication of sculpture had changed forever.

By creating efficiencies in time, labor, materials, environmental controls, and cost, this shift demands a new pedagogy in sculpture, while not replacing the artist's hands or heart. Why? Because in extended realities, the student-artist uses their hands to select and operate tools that manipulate virtual media in a virtual space. This creates an artistically intuitive experience, distinct

from digitally modeling with a keyboard in a CAD-based application.

Mirroring the complexity and skill typically seen at the graduate and professional levels, the impact of this shift is evident in student work. This development has not only enriched the classroom experience but, thanks to the incredible support of Tony Deluca, Dr. George Claffey, and Dean Gigliotti, has also garnered attention within the broader academic community. Students' 3D-printed sculptures, designed in extended realities, are now exhibited in a beautifully illuminated glass display case in The XR Lab which in turn has become another valued teaching tool.

Working with Tony, Naz, and, by extension, Dr. Claffey has been seamless, efficient, productive, and highly enjoyable. Their efforts and support have made it possible for one of the most profound developments in the history of sculpture education to take place here at Central, within the Department of Art and Design. I could not be more grateful.



## C. Christopher Lee: Enhancing Learning in the Hyflex 2.0 Proscenium Room



I was privileged to use the Proscenium Room at the library to teach BUS 581-01, Graduate Special Project (MBA capstone) course. The class ran via HyFlex 2.0 mode. Twenty students were enrolled in the course. Most of the time, about 10 students attended the classroom, while the other half chose the online synchronous mode. Mr. Rajae Willis provided on-site technical support during the class. I would like to thank Rajae for helping me and students succeed in the classroom. The room was equipped with 20 large monitors, which enabled me to effectively interact with students at remote sites. Previously, students turned off their video to

avoid any technical issues with the Internet connection. The Proscenium Room had no such issues whatsoever. Throughout the semester, the Internet connection was smooth and fast. Furthermore, the Proscenium Room offered an excellent smart whiteboard, two supplemental monitors for the instructor, and one vertical monitor. Overall, the Proscenium Room certainly increased my teaching effectiveness and students' learning effectiveness. Thanks for the opportunity to use the state-of-the-art classroom.

## Misty Scoggins: Innovating Nurse Anesthesia Education with XR Technology



Dr. Misty Scoggins, Associate Professor in the Department of Nurse Anesthesia Practice (DNAP), is transforming nurse anesthesia education through immersive technology. When the XR Lab became available at Central, Dr. Scoggins participated in various hands-on demonstrations of apps. These apps were designed to address gaps in active learning. Dr. Scoggins worked with the XR Lab support team to select software that best met the DNAP's needs, leading to the launch of a virtual cadaver lab. The virtual cadaver enables hands-on learning while avoiding the financial, ethical, and logistical challenges of traditional cadaver labs.

Dr. Scoggins, together with Drs. Robbin Smith and Lydia Lee-Villarreal, have integrated the Virtual Speech app into the final semester of the three-year doctoral program. Residents use various virtual scenarios to practice

advocacy for nurse anesthesia and patients. The class includes three structured workshops: face-to-face meetings, public hearing testimony, and elevator pitch scenarios. Nurse anesthesia residents interact with AI avatars in a supportive environment and receive targeted feedback on strengths and areas for improvement. By the end of the semester, residents are confident and prepared to use their skills to advocate effectively during Capitol Hill meetings in Washington, DC.

## Real or Rendered?

In October 2025, the Artificial Intelligence and Information Systems Club hosted “Real or Rendered?”, a live spin-off of the classic Turing Test, bringing in over 60 attendees to Alumni Hall. Contestants lined up single-file and were shown questions on-screen alongside answers either written by humans or generated by a variety of AI chatbots — including ChatGPT, Claude, Grok, and others — then had to physically step left if they believed the response was “rendered” by AI, or right they believed it was written by a “real” human. With each round, the group thinned until a winner was crowned, with the top 5 remaining contestants each walking away with a prize sponsored by the Information Technology Department. The event was a lively and engaging way to bring AI literacy to life and challenge attendees to think critically about the line between human and machine.



## Fueling Student Research

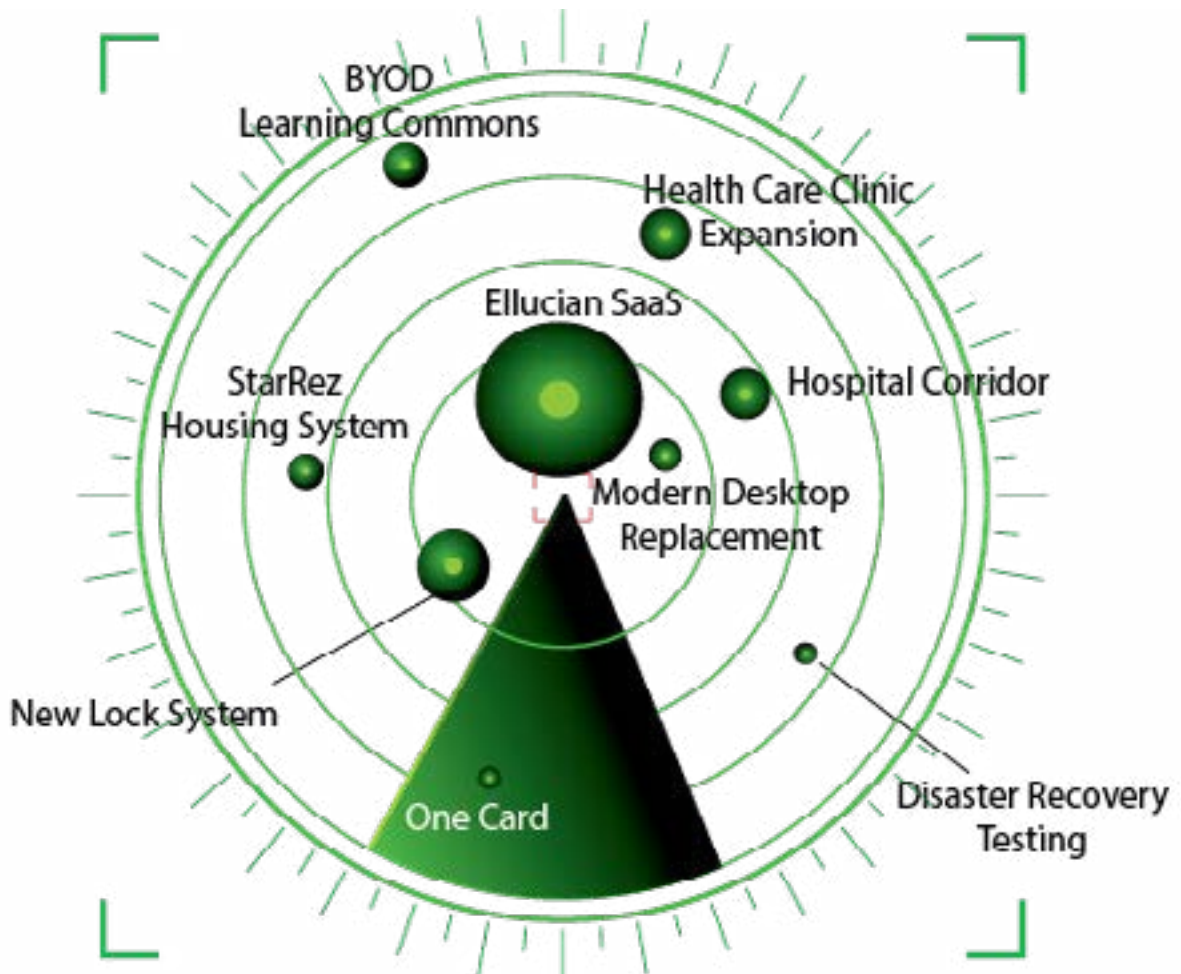


Sadie Simek is a dual-enrolled undergraduate and master's student in Cybersecurity at Central, President of the Women in Cybersecurity Club, and a former student worker in the Information Technology (IT) Department as an On-Site Support Technician. When the IT Department provided her with a dedicated research space and an NVIDIA DGX Spark desktop computer, it transformed her AI research from a slow grind on a personal laptop into a full-scale academic endeavor, cutting model processing time from weeks down to overnight runs and enabling her to benchmark 131 large language models in four months. Her research, advised by Dr. Ramyapandian “Ramya” Vijayakanthan, investigates why locally-hosted

AI models produce inconsistent outputs even when given identical prompts. This concept, known as “AI model instability,” is an emerging and understudied problem in AI security. Their efforts have since grown, with additional devices and students joining the project. Most recently, the team’s paper was accepted for presentation at the 2nd Annual CAIA Research Symposium at the Hartford AI Conference, where they will present alongside speakers from Google and IBM, while also pursuing publication at ACM CCS, a conference with a 9%-19% acceptance rate. As Sadie noted, “We could not have hit this milestone without the momentum you helped generate by providing a research space and the extra technology.”



# On Our Radar for 2027



[ccsu.edu/it](https://ccsu.edu/it)

