2025
ANNUAL REPORT

Oct. 1, 2024 – Sep. 30, 2025

Center for Teaching with Technology

WILLIAM PATERSON UNIVERSITY

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Dear Colleagues,

I am incredibly pleased to present our CTT annual report for 2025. The Center for Teaching with Technology (CTT) stands at the forefront of advancing instructional excellence at William Paterson University. Guided by our mission to inspire and empower faculty, we deliver comprehensive support in educational technology, instructional design, and innovative teaching practices that enrich learning experiences for all students.

This year, CTT focused on five strategic priorities that reflect the evolving landscape of higher education:

- Generative AI in Teaching – exploring practical applications to enhance pedagogy.
- Extended Reality in Teaching – integrating immersive technologies for deeper engagement.
- Instructional Design Support – partnering with faculty to create dynamic, learner-centered courses.
- Analytics for Student Success – leveraging data to improve outcomes and retention.
- Blackboard Support – ensuring a seamless and effective digital learning environment.

Our accomplishments over the past year have been a testament to the dedication and creativity of our faculty and staff. While this report may not capture every success story, it represents our shared commitment to innovation and continuous improvement. We invite you to connect with us—virtually or in person—to learn more about who we are, what we are doing, and where we are headed.

Sincerely,

Patrick Ryan

Patrick Ryan
Director of Instruction and Research Technology

Center for Teaching with Technology

Planning and Supporting the Future of Teaching at WPUNJ

The Center for Teaching with Technology (CTT) at William Paterson University of New Jersey (WPUNJ) offers a wide range of services and support to assist faculty enhance their teaching methods with integrated technologies and create engaging and effective learning experiences for all students.

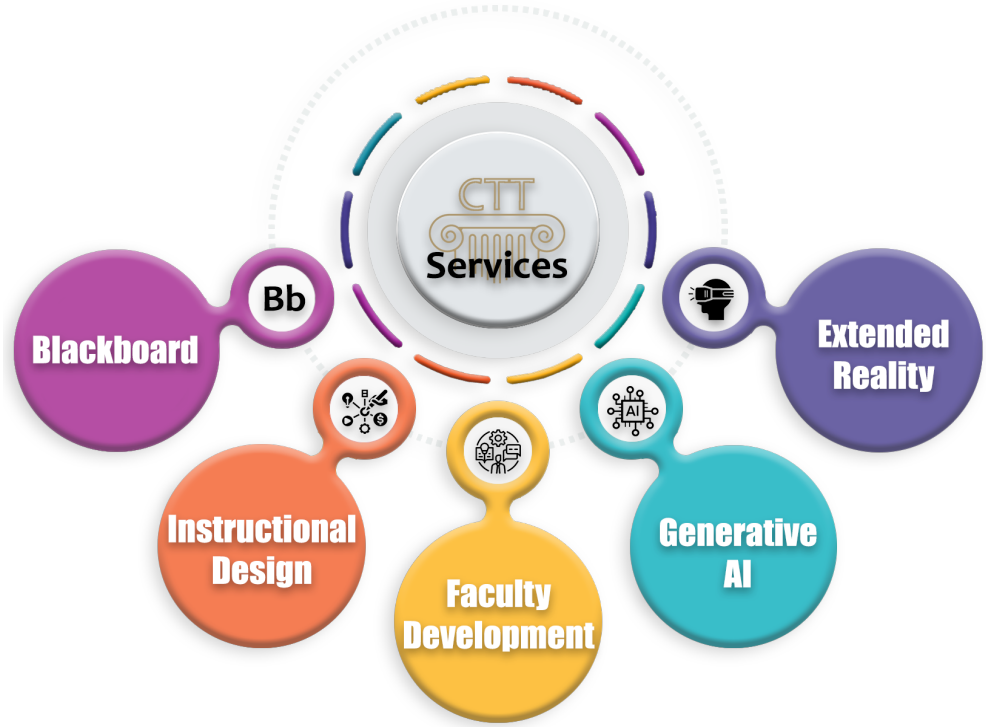
MISSION

The mission of CTT is to inspire and equip faculty in effectively integrating innovative technologies to design inclusive, engaging, and impactful teaching and learning environments.

KEY OBJECTIVES

In supporting the mission, the Center for Teaching with Technology

- Provides faculty with access to advanced technologies such as Generative AI and Extended Reality to strengthen teaching and improve student learning outcomes.
- Supports faculty in redesigning courses to be innovative, engaging, and pedagogically sound through individualized instructional design guidance and mentorship.
- Delivers a variety of professional development programs that build faculty expertise in effectively integrating technology into teaching and learning.



EXECUTIVE SUMMARY

2025 CTT ANNUAL REPORT

AY 2025 CTT Goal:

"to equip faculty to leverage innovative technology for inclusive, engaging, and impactful learning experiences through the seamless integration of technology"

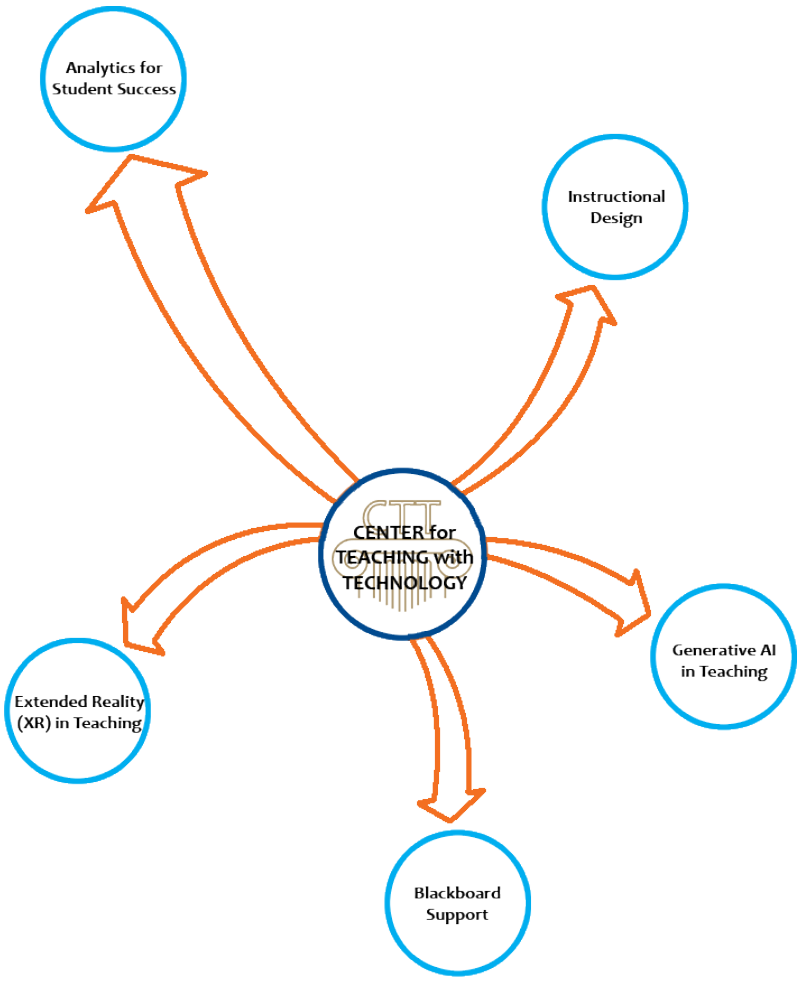
AY 2025 CTT Objectives:

- *Generative AI in Teaching*
- *Extended Reality in Teaching*
- *Instructional Design Support*
- *Analytics for Student Success*
- *Blackboard Support*

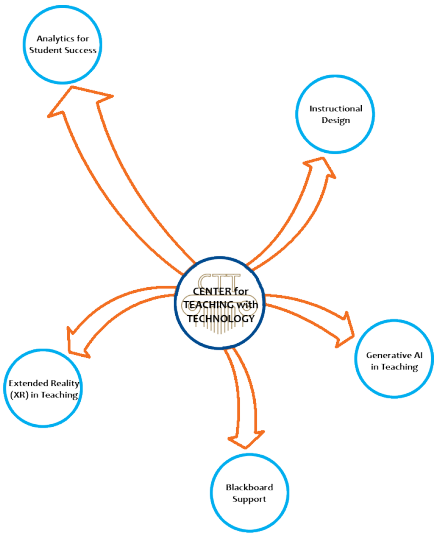
The Goals and Objectives were developed in alignment with the WPU Future Initiatives study (2024).

AY2025 Goals

Planning the Future of Teaching at WPUNJ



The goal of the Center for Teaching with Technology (CTT) is to inspire and equip faculty in effectively integrating innovative technologies to design inclusive, engaging, and impactful teaching and learning environments.

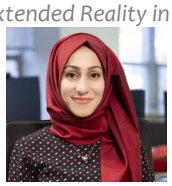


Project Leads:

- *Generative AI in Teaching*

Ming Jian

- *Extended Reality in Teaching*



Sena Bulak

- *Instructional Design*

Jae Kim

- *Analytics for Student Success & Blackboard Support*

Housen Maratouk

CTT AY2025 Objectives

Generative AI in Teaching

- Develop Comprehensive Generative AI Guidelines for Students
- Create a Practical Guide for Teaching with Generative AI
- Design and develop a self-paced AI Literacy Blackboard course
- Deliver webinars and workshop series on Generative AI

Extended Reality in Teaching

- Design and deliver hands-on workshops and webinars on Extended Reality
- Prepare a comprehensive report on "XR Integration into the Curriculum"
- Collaborate with academic departments to engage faculty in designing and implementing pilot XR projects
- Complete training sessions on XR content creation tools and platforms

Instructional Design

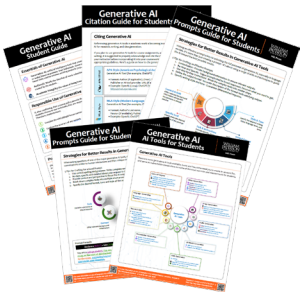
- Provide support for WP Online Programs
- Manage the MS Booking and LibCal sites to coordinate and maintain consultations
- Develop and update consultation and workshop offerings
- Offer one-on-one consultations, webinars, and workshops
- Track and summarize webinar offerings

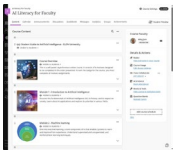
Analytics for Student Success

- Utilize Blackboard's Insight Developer site to collect data and generate reports on Blackboard usage
- Complete the Blackboard Data Explorers online course to develop skills in using SQL queries within Snowflake
- Develop supporting documentation to guide faculty in leveraging Blackboard Analytics effectively

Blackboard Support

- Review and update local documentation and tutorials to support effective use of Blackboard
- Develop the DIY Guides and workshop materials on Blackboard as needed
- Control the quality of the CTT team's responses to client requests submitted through the Web Help Desk.
- Provide consultations and webinars to help faculty enhance their use of Blackboard
- Provide faculty and student training and support for Blackboard Ultra
- Review and update the Blackboard documentation site to ensure accuracy and relevance
- Design and deliver new webinars and tutorials to train faculty and staff on





Achievements in Generative AI in Teaching

Developed a Set of Generative AI Guidelines for Students

1. Generative AI Guide
2. Citing Generative AI Student Guide
3. Prompt Engineering Guide
4. Prompt Engineering Guide
5. Generative AI Tools

Developed AI Literacy for Faculty

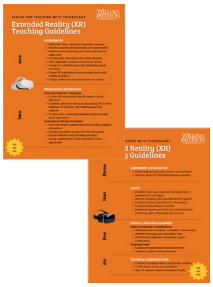
Designed a Blackboard course to help faculty acquiring a foundational understanding of Generative AI, familiarize themselves with general AI tools, utilize specialized AI tools for teaching, learning, and research, use AI tools ethically and responsibly, and critically assess AI output.

Developed and Delivered Webinars on Generative AI

1. Which AI to Choose? (10/8/2024)
2. Crafting Effective AI Prompts for Instructors (11/6/2024)
3. Effective Approaches for Addressing AI-Assisted Cheating (12/4/2024)
4. Create GPTs for Teaching and Learning (2/28/2025)
5. AI Features in Adobe Products (FireFly and Photoshop) (5/31/2025)
6. How to Use Microsoft Copilot (3/31/2025)
7. How to use Zoom AI Companion (4/30/2025)

Presented at Faculty Meetings

1. Enhancing Teaching with AI: Practical Application, at the provost's "What Works for Students" conference (12/16/2024)
2. Overview of AI Tools at the "AI Pedagogy Sandbox Webinar" organized by the Writing Across Curriculum on March 7, 2025



Achievements in Extended Reality in Teaching

Developed a Set of Reports on Extended Reality in Teaching

1. XR Teaching Guideline
2. XR Open House Report – Stevens University
3. Liaison Report: Chemistry Department
4. Liaison Report: Nursing Department
5. Li110 Immersive Technology Suite

Achievements in Instructional Design

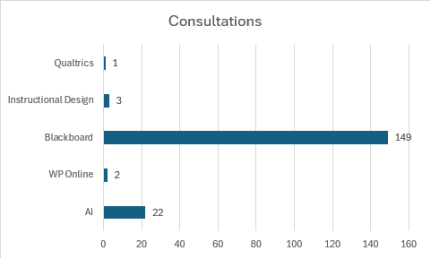
Developed a Procedure for Recertifying WP Online Courses

1. Policy for Recertifying WP Online courses – Overview
2. Policy for Recertifying WP Online courses – Presentation

28 Topics

133 Webinars

38 Attendees



Webinars and Workshops

CTT offered 30 to 45-minute webinars to assist faculty members with a variety of topics, including the effective use of Blackboard, online course design, assessment methods, accessibility, pedagogical strategies, Artificial Intelligence, Extended Reality, Quality Matters, and technology tools.

28 TOPICS	133 WEBINARS	38 ATTENDEES

Consultations

CTT offered individual consultations to assist faculty members with a variety of topics, including WP Online, AI, Qualtrics, and Blackboard features.

5 AREAS	177 Consultations	188 ATTENDEES

Managing MS Booking and LibCal Sites

To facilitate faculty access to professional development opportunities and instructional support, CTT utilized **Microsoft Booking** and **LibCal** applications to manage meeting and registration for each session.

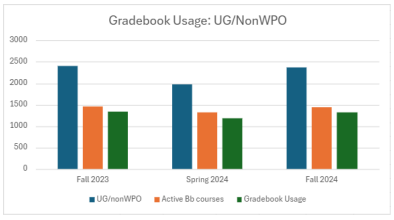
- Microsoft Booking
- LibCal

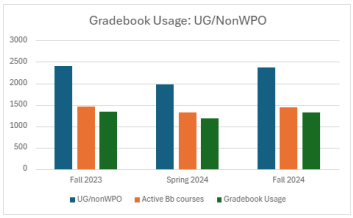
The use of Microsoft Booking facilitated **individual consultation scheduling**, giving faculty flexible options to select meeting times while ensuring accurate calendar integration and resource management. Meanwhile, LibCal served as the platform for **webinar and workshop registration**, offering faculty an organized way to view upcoming sessions, sign up seamlessly, and track event details.

Analytics for Student Success

During the AY 2025, CTT demonstrated the ways to support faculty efficiently.

Use of Snowflake database for retrieving Blackboard Usage





Blackboard Analytics for Faculty

Blackboard Analytics

Appraisals from Faculty

Excellent support always!

Excellent services from IRT!

Incredibly fast considering this was the first day of the semester – thank you!

Our BB staff is terrific. They are always very helpful and respond very quickly.

Quick and efficient!

The problem was addressed quickly, and I am so thankful!

Blackboard Support

During the AY 2025, CTT managed a total of 2,749 Web Helpdesk requests, distributed across staff members according to their areas of responsibility. The majority of requests (70%) were handled by Housen Maratouk, followed by Ming Jian with 15%, Jae Kim with 8%, Dominique Harris with 4%, and Sena Bulak with 3%. This distribution highlights the diverse expertise within the team and the collaborative effort required to meet faculty and student needs.

Faculty accounted for the overwhelming majority with 2,269 requests (82%), while students submitted 480 requests (18%). This pattern reflects CTT's primary role in supporting instructors in course design, technology integration, and effective use of Blackboard and other teaching tools, while also extending direct assistance to students as needed.

It is noticed that requests were nearly evenly split between WP Online courses (1,358; 49%) and regular campus-based courses (1,391; 51%), demonstrating CTT's balanced support for both online and face-to-face modalities.

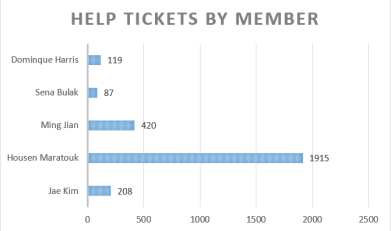
2749 Tickets

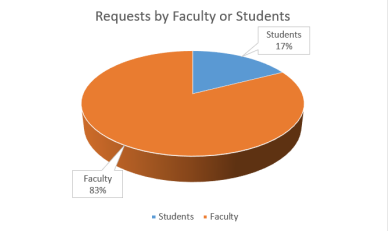
2269 Faculty

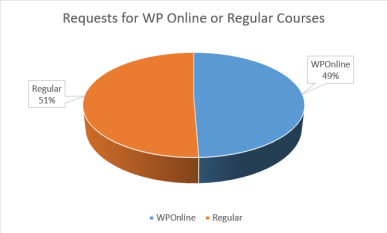
480 Students

1358 WP Online

1391 Regular







Assessment	73	3%
Assignments	233	8%
Course Banner Request	94	3%
Course Restoration	39	1%
Course Copy	396	14%
Discussion Board	41	2%
Grade Center	120	4%
Loggin in	55	2%
Course Merge	402	15%
Other	1093	40%
Peer Evaluation	156	6%
Respondus	47	2%
Total	2749	100%

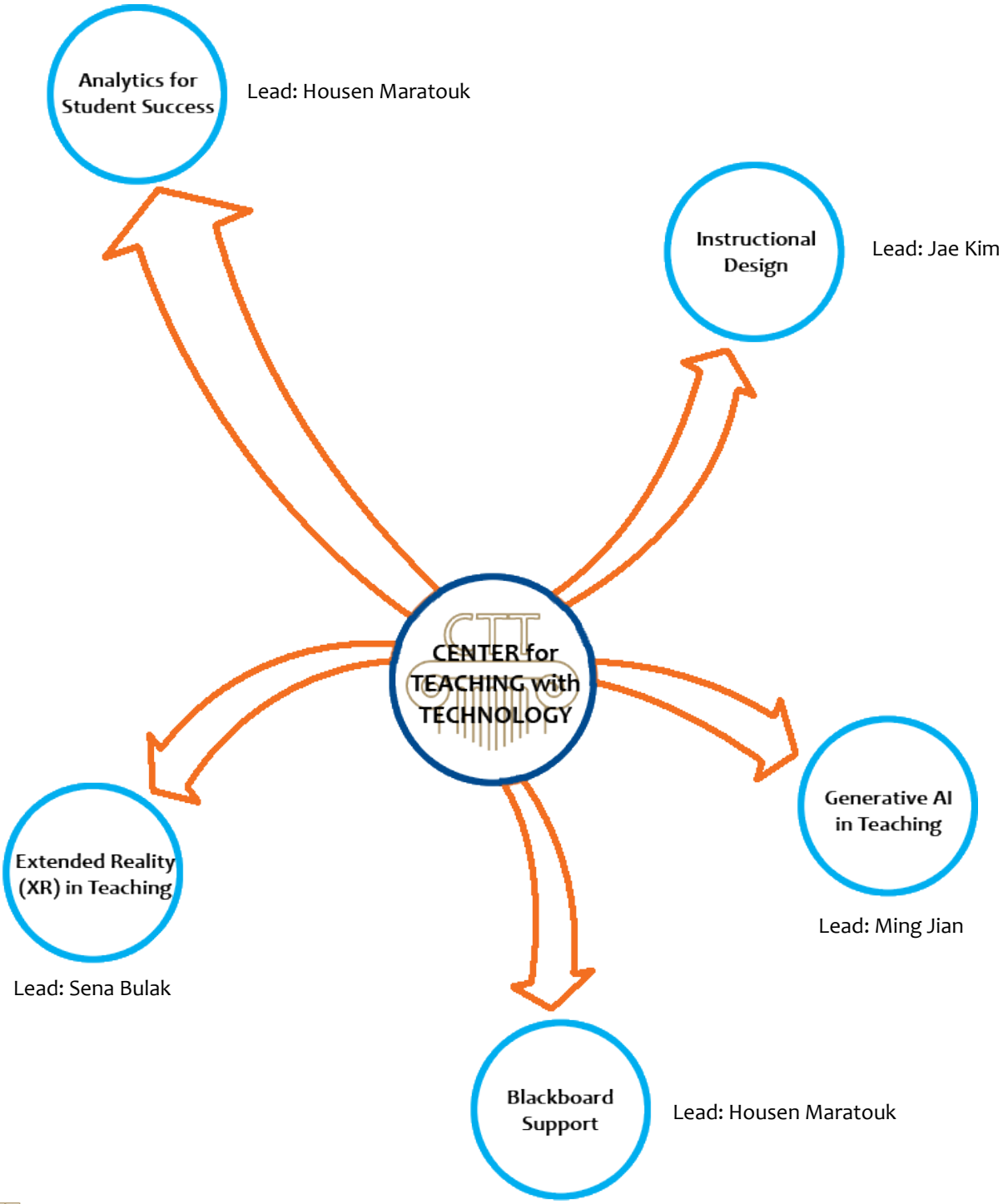
NEW CTT WEBSITE

CTT launched a newly redesigned website to better serve the WPU community in alignment with the WPU Future Initiative study. The new site features an intuitive navigation structure and streamlines access to teaching and learning resources, including Blackboard Ultra support, instructional design services, Generative AI resources, and Extended Reality initiatives.

https://www.wpunj.edu/irt/ctt/

AY2025 GOALS

Planning the Future of Teaching at WPUNJ



AY2025 OBJECTIVES

Planning the Future of Teaching at WPUNJ

CTT has identified 5 Technology Trends that will transform William Paterson University to the next level through the research on the WPU Future Initiatives (2024). These are considered as major forces impacting WPUNJ and coalesced around five key drivers of change. They are: Generative Artificial Intelligence (GenAI), Extended Reality (XR), analytics, online learning, and micro-credentials. Staying informed and providing support for these innovations is essential for the success of our university. To ensure that our faculty and students are well-prepared for the future, CTT has established 5 objectives to actively keep pace with the advances in technology.

GENERATIVE AI IN TEACHING

Generative AI (GAI) refers to artificial intelligence technologies that create new content, such as text, images, audio, and video, by learning patterns from existing data. Based on the research findings from the previous year completed by Drs. Jian and Kim, CTT focuses on creating a certificate program for GAI Literacy and GAI hands-on workshops for utilizing various GAI tools for teaching.

- Develop comprehensive Generative AI guidelines for students to promote responsible and informed use.
- Create a practical guide for teaching with Generative AI, including clear guidance on policies at the national, state (NJ), and institutional (WPU) levels, as well as considerations, recommendations, and best practices for integrating GenAI into the curriculum.
- Design and develop a self-paced AI Literacy (AI Basics) Blackboard course to help faculty recognizing AI in everyday applications, understanding fundamental concepts such as machine learning (ML) and natural language processing (NLP), identifying and effectively using appropriate AI tools, and critically evaluating AI tools and AI-generated outputs.
- Deliver webinars and workshop series on Generative AI to provide faculty with practical training on AI literacy, effective prompt design, teaching-focused prompt examples, and the use of diverse AI tools - supporting faculty in adapting to rapidly evolving AI technologies in teaching and learning.

EXTENDED REALITY IN TEACHING

Virtual Reality and Augmented Reality are trending technologies that require not only the right hardware but also high-quality, engaging content to be effectively integrated into teaching practices. Faculty need access to relevant resources, which can be sourced through collaborating with third-party companies or developing in-house content. CTT recommends faculty with the tools and support they need to enhance their instructional methods by providing a dedicated service for content creation and finding the appropriate resources.

- Design and deliver hands-on workshops and webinars on Extended Reality (XR).
- Prepare a comprehensive report on "XR Integration into the Curriculum."
- Collaborate with academic departments to engage faculty in designing and implementing pilot XR projects in their classrooms.
- Complete training sessions on XR content creation tools and platforms, including Sketchfab, Blender, and Adobe Aero.
- Develop "XR in Teaching" guidelines (a booklet) to support the effective use of Extended Reality in teaching at WPU.
- Create promotional materials—such as email campaigns, digital flyers, and website updates—to highlight the benefits of XR technologies.
- Benchmark best practices for integrating XR technologies into higher education.
- Provide consultation services to guide faculty on incorporating XR into their teaching practices.
- Develop a project plan for offering XR content development services to the WPU community.
- Conduct research on the applications of Virtual Reality (VR), Augmented Reality (AR), and Extended Reality (XR) in higher education settings.

INSTRUCTIONAL DESIGN

Instructional design is the process of bringing together evidence-based teaching practices and educational technologies to develop engaging, interactive, and inclusive learning experiences for student success. CTT offers instructional design services to develop engaging courses to meet the needs of students in face-to-face, hybrid, and online learning environments.

- Provide support for WP Online Programs as needed.
- Manage the MS Booking site to coordinate and maintain consultations.
- Manage the LibCal site to schedule and maintain webinars and workshops.
- Develop and update consultation and workshop offerings to meet evolving faculty and learner needs.
- Offer one-on-one consultations, webinars, and workshops for faculty on topics such as Online/Hybrid course redesign, Quality Matters, Active Learning, and Online Teaching by meeting with department chairs and faculty, distributing advertising materials, and sending periodic notifications as needed.
- Track and summarize webinar offerings, including topics, number of sessions, faculty attendance, and participant names.

ANALYTICS FOR STUDENT SUCCESS

Blackboard Analytics is a suite of business intelligence applications specifically designed for educational institutions, focusing on providing deeper insights into institutional performance and real-time progress tracking. It can give key insights into the ways that students use Blackboard tools, content, and assessments within the course. The reports from Blackboard Analytics can be useful in understanding what aspects of the online content are working well, seeing trends in student interactions, and charting the relationship between time spent on Blackboard and the students' grades.

- Utilize Blackboard's Insight Developer site to collect data and generate reports on Blackboard usage in response to administrative requests.
- Complete the Blackboard Data Explorers online course to develop skills in using SQL queries within Snowflake for generating reports on Blackboard activity.
- Develop supporting documentation to guide faculty in leveraging Blackboard Analytics effectively.

BLACKBOARD SUPPORT

Blackboard support provides faculty and students with the resources and assistance needed to effectively use the Blackboard learning management system without any technological difficulties. Support typically includes technical help for accessing courses, submitting assignments, and troubleshooting login or system errors, as well as instructional guidance on creating course content, building assessments, and managing grades. CTT offers multiple channels of support, such as web help desks, phone assistance, email requests, and self-service knowledge bases with step-by-step tutorials. Faculty often receive specialized support for course design, accessibility, and integrating third-party tools, while students benefit from guidance on navigating the platform, using communication features, and staying organized with calendars and notifications. The objectives of Blackboard support is to ensure a smooth, reliable, and user-friendly experience that enhances teaching and learning by addressing both technical and pedagogical needs.

- Identify and resolve technical issues by collaborating with Enterprise Information Systems (EIS) and Anthology/Blackboard tech support team.
- Review and update local documentation and tutorials to support effective use of Blackboard.
- Develop the DIY Guides and workshop materials on Blackboard as needed.
- Supervise the CTT team's responses to client requests submitted through the Web Help Desk.
- Provide consultations and webinars to help faculty enhance their use of Blackboard.
- Provide faculty and student training and support for Blackboard Ultra
- Review and update the Blackboard documentation site to ensure accuracy and relevance.
- Design and deliver new webinars and tutorials to train faculty and staff on Blackboard features.

GENERATIVE AI in TEACHING

REIMAGING TEACHING WITH AI

OBJECTIVES

- Develop Comprehensive Generative AI Guidelines for Students to promote responsible and informed use.
- Create a Practical Guide for Teaching with Generative AI, providing clear guidance on policies at the national, state (NJ), and institutional (WPU) levels, as well as considerations, recommendations, and best practices for integrating GenAI into higher education.
- Design and develop a self-paced AI Literacy (AI Basics) Blackboard course to help faculty recognizing AI in everyday applications, understanding fundamental concepts such as machine learning (ML) and natural language processing (NLP), identifying and effectively using appropriate AI tools, and critically evaluating AI tools and AI-generated outputs.
- Deliver webinars and workshop series on Generative AI to provide faculty with practical training on AI literacy, effective prompt design, teaching-focused prompt examples, and the use of diverse AI tools—supporting faculty in adapting to rapidly evolving AI technologies in teaching and learning.

ACHIEVEMENTS

The rapid advance of Generative Artificial Intelligence (GenAI) has created both exciting opportunities and new challenges for students at William Paterson University. Gen AI has the potential to transform the way students learn, conduct research, and demonstrate their knowledge, but they also raise critical questions about academic integrity, responsible use, and the skills needed to engage effectively with AI systems. To support students in navigating this evolving landscape, a set of Generative AI Guidelines for Students was developed to promote awareness, ethical practices, and practical strategies for using AI as a learning partner rather than a shortcut.

- **Generative AI Guidelines for Students (**These documents are also available at https://www.wpunj.edu/irt/ctt/generative-ai-for-students)
  1. Generative AI Guide to provide an overview of key concepts and responsible use
  2. Citing Generative AI Student Guide to promote academic integrity
  3. Prompt Engineering Guide to support effective interaction with GAI tools
  4. Prompt Engineering Guide to support effective interaction with GAI tools
  5. Generative AI Tools to introduce and compare platforms

Generative AI Student Guide

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Essentials of Generative AI

Generative AI: artificial intelligence tools that create new content (e.g., text, images, music or audio) based on prompts from individuals. Generative AI can be distinguished from AI-based tools used to enhance existing products (e.g., proofreading, grammar checking).

Authentic Work: the idea that all work submitted for credit should be original content created by the student.

Academic Integrity: the values of being honest and ethical in one's academic work.

Responsible Use of Generative AI

If, after confirming that a course policy permits the use of generative AI for academic coursework, students choose to use such tools, they are responsible for the final content submitted for credit. Therefore, students must:

1. Consider the ethical/legal issues surrounding its use;
2. Confirm the accuracy of any output;
3. Check the output for biases;
4. Ensure any work submitted for credit significantly differs from the AI output; and
5. When required by the professor, disclose the use of AI (through citation or other means)

Possible Consequence for Inappropriate Use

Disciplinary conventions guide what is considered (in)appropriate in a course. Additionally, using AI in a way that isn't explicitly authorized by the professor in the syllabus is considered inappropriate use. The university's Academic Integrity Policy informs any consequences for the misuse of AI technology in academic coursework. See the Academic Integrity Policy at https://www.wpunj.edu/cte/wpu-policies/ for more information.

For more information on use of Generative AI at William Paterson University, navigate to http://www.wpunj.edu/irt/ctt or scan the bar code at left

Questions? Contact us at 973-720-HELP or Web Help Desk (https://help.wpunj.edu)

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Generative AI Citation Guide for Students

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Citing Generative AI

Referencing generative AI tools in academic work is becoming increasingly important as students use AI for research, writing, and idea generation.

If you plan to use generative AI tools for course assignments, academic projects, or any published writing, it is suggested to properly acknowledge and cite the AI-generated content. Always check with your instructor before incorporating AI into your coursework to ensure you are following the appropriate guidelines. Here's a guide on how to cite generative AI source:

APA STYLE

APA Style (American Psychological Association)

Generative AI Tool (for example, ChatGPT)

- Format: Author (if applicable). (Year). *Title of the AI model* (Version, if available). Publisher or AI tool provider. URL (if applicable)
- **Example:** OpenAI. (2024). *ChatGPT* (Version GPT-4). OpenAI. https://chat.openai.com/

MLA Style

MLA Style (Modern Language Association)

Generative AI Tool (for example, ChatGPT)

- Format: Author's Last name, First name. *Title or description of the interaction.* Version (if available), Publisher or AI tool provider, Year.
- Example: OpenAI. *ChatGPT*. Version GPT-4, OpenAI, 2024.

Chicago Style

Chicago Style (Chicago Manual of Style)

Generative AI Tool (for example, ChatGPT)

- Format: Author Last Name, First Name (if applicable). *Title of AI tool*. Version (if available). Publisher or AI Tool provider, Year. URL (if applicable).
- Example: OpenAI. *ChatGPT*. Version GPT-4. OpenAI, 2024. https://chat.openai.com/

For more information on use of Generative AI at William Paterson University, navigate to http://www.wpunj.edu/irt/ctt or scan the bar code at left

Questions? Contact us at 973-720-HELP or Web Help Desk (https://help.wpunj.edu)

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Generative AI Prompts Guide for Students

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Strategies for Better Results in Generative AI Tools

Writing an effective prompt is key to unlocking the full potential of generative AI, especially in language models. It's more than just creating a prompt - it's about using a range of skills and techniques to guide the AI toward the best possible results.

5 Tips for Crafting an Effective Prompts

1. Contextualize - Provide background information to ensure relevant outputs.
2. Be Clear and Specific - Vague prompts lead to broad responses. Focus on what you want to get.
3. Use step-by-step Instructions - Break the complex tasks into smaller steps.
4. Define the output format - Accurate description of the format leads satisfying output.
5. Specify writing style and tone - Guarantee differentiated response.

Context & Role
Offer relevant background information along with the persona AI should assume

Style & Tone
Specify the desired writing style, language level, and tone

Specific Goal
Clearly state the desired outcome of the prompt

Task & Instructions
Provide specific, clear directions on what you want to get

Output Format
Define the desired structure and length (e.g., bullet points, table, paragraph, specific word counts)

Prompt Example

[as an expert in data scientist at ABC College] + [to propose the possible impact on use of AI at department level] + [explain the pros and cons of adopting AI platform in academic department] + [in table format with 2-3 paragraphs under 1,000 words] + [using friendly and encouraging tone]

[Context & Role] + [Specific Goal] + [Task & Instructions] + [Output Format] + [Style & Tone]

For more information on use of Generative AI at William Paterson University, navigate to http://www.wpunj.edu/irt/ctt or scan the bar code at left

Questions? Contact us at 973-720-HELP or Web Help Desk (https://help.wpunj.edu)

CTT

Generative AI Prompts Guide for Students

WILLIAM PATERSON UNIVERSITY
Will. Power.

Strategies for Better Results in Generative AI Tools

When asking questions of one of the major generative AI tools, it is suggested how to have conversations similar to human interactions and then critique the results carefully for the best results.

5 Tips for Crafting for a Good Prompt

1. Use correct spelling and grammar. Write complete sentences.
2. Be clear, specific and detailed about your request to the AI.
3. Provide context and perspective to focus the AI output.
4. Break down complex tasks into multiple short prompts.
5. Specify the desired format, tone and style of the output.

Role
Declaire a persona AI should assume

Output Format
Define the desired structure and length (e.g., bullet points, table, paragraph, specific word counts)

Context
Offer relevant background information

Task & Instructions
Provide specific, clear directions on what you want to get

Prompt Formula

Declare a [ROLE] + Give [CONTEXT] + Create a [TASK] + and specify [FORMAT]

You are a college student. You are taking a political science course and writing a 1,500-word essay on the topic of disinformation in modern societies. Please produce a potential outline for the essay, suggesting key points to cover and possible sources to research. Cite the sources for your response.

For more information on use of Generative AI at William Paterson University, navigate to http://www.wpunj.edu/irt/ctt or scan the bar code at left

Questions? Contact us at 973-720-HELP or Web Help Desk (https://help.wpunj.edu)

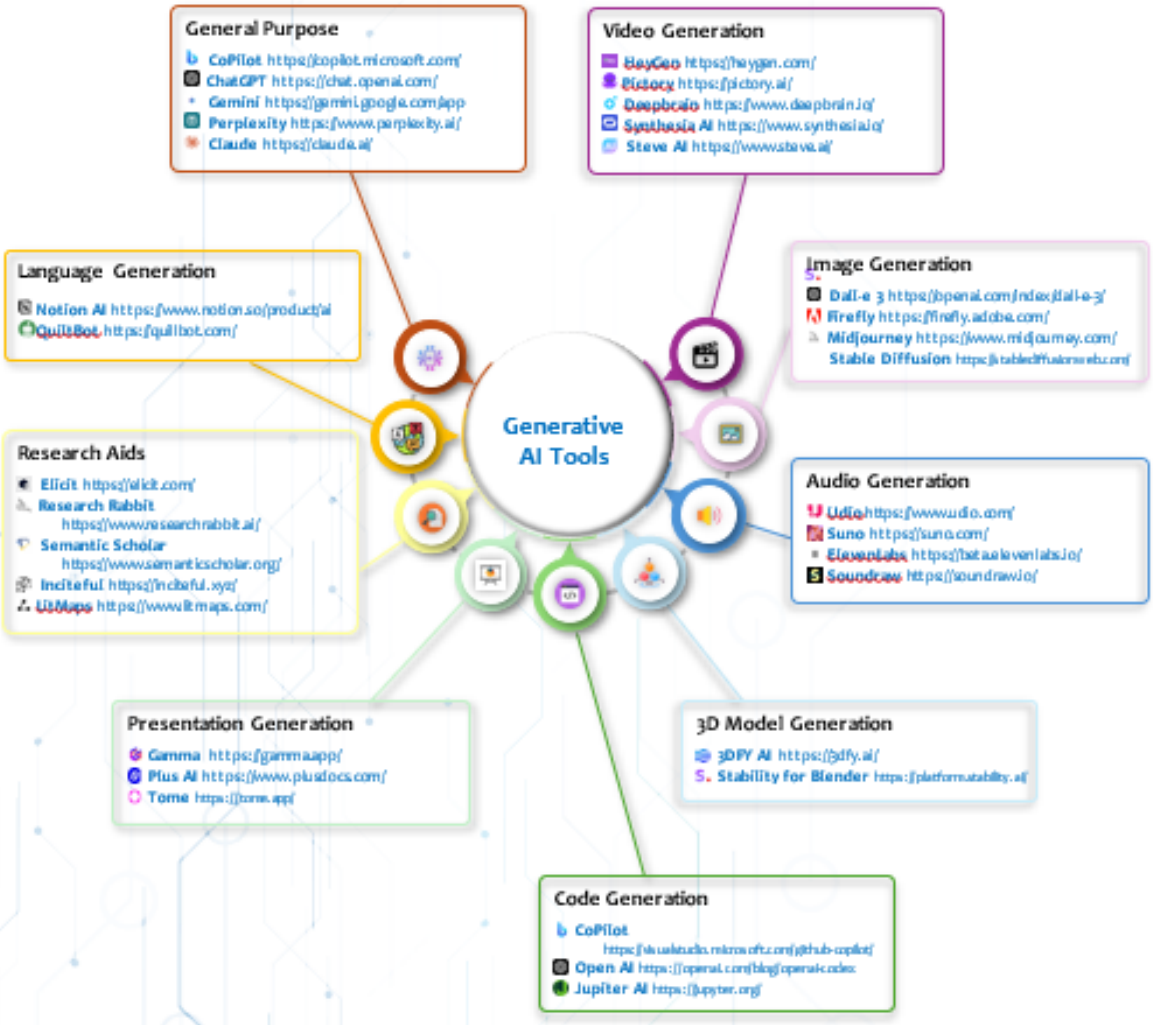
CTT

Generative AI
AI Tools for Students

WILLIAM PATERSON UNIVERSITY
Will. Power.

Generative AI Tools

There are many generative AI tools available. Some are free, some need you to create an account for, and some are subscription-based. Here are some of the most common and relevant tools for students.



For more information on use of Generative AI at William Paterson University, navigate to http://www.wpunj.edu/int/ctt or scan the bar code at left

Questions? Contact us at 973-720-HELP or Web Help Desk (https://help.wpunj.edu)

To support faculty in developing proficiency with Generative AI, CTT designed and delivered a range of professional development activities, including workshops, webinars, and one-on-one consultations. In addition, CTT developed a self-paced AI Literacy Blackboard course to help faculty recognize AI in everyday applications - particularly within higher education - understand fundamental concepts such as machine learning (ML) and natural language processing (NLP), identify appropriate AI tools and learn how to use them effectively, and critically evaluate both AI tools and the outputs they generate.

- **AI Literacy Course on Blackboard** (https://bb.wpunj.edu/ultra/courses/_48450_1/outline)
  Artificial intelligence is profoundly reshaping higher education, spurring widespread changes and shifts in teaching and learning. AI literacy - the ability to understand, use, and critically evaluate these transformative AI technologies responsibly and ethically - has become a fundamental competency for all educators.

  This self-paced and asynchronous online course is designed to help faculty acquire a foundational understanding of Generative AI, familiarize themselves with general AI tools, utilize specialized AI tools for teaching, learning, and research, use AI tools ethically and responsibly, and critically assess AI output. This course comprises 6 modules designed to be completed in the order presented. To earn the badge for the course, you must complete all module assignments.

  By the end of this course, participants will be able to:
  1. Identify the foundational concepts of artificial intelligence and its main subfields and applications areas related to higher education.
  2. Explain basic concepts of how machine learns, how neural networks work, and how natural language is processed.
  3. Demonstrate understanding of how Generative AI and Large Language Model work
  4. Identify AI tools for teaching, learning, and research.
  5. Assess the applicability and reliability of AI tools for teaching and learning
  6. Critically analyze AI-generated outputs for accuracy, potential biases, and ethical concerns.
  7. Create personal and course-specific AI usage policies to ensure ethical and responsible application.
  8. Evaluate and address ethical implications of AI use, including bias, misuse, and misapplication.
  9. Advocate for equitable and responsible AI practices aligned with academic and professional standards.
  10. Utilize AI tools to streamline academic responsibilities while maintaining ethical and effective practices.

Module 0: Course Overview

- Course introduction and Objectives
- AI Literacy in Teaching and Learning for Faculty – Core Competency (EduCause)
- Artificial Intelligence Terms (Stanford)

Module 1: Introduction to Artificial Intelligence

- Artificial Intelligence - Definition, Main Types, Key Areas and Technologies
- A Brief History of AI
- AI Taxonomy
- References

Module 2: Machine learning

- Understanding Machine Learning (ML) - Module Overview
- Supervised Learning
- Unsupervised Learning
- Reinforcement Learning
- Conversation with An AI Expert about Machine Learning (Assignment)

Module 3: Neural networks

- Neural Networks and How AI "Thinks" - Module Overviews
- Understanding How a Neuron Network Works
- AI Explained: What Does the Number of Parameters in an LLM Mean?

Module 4: Natural language processing - Generative AI, Large Language Model, Prompt Design

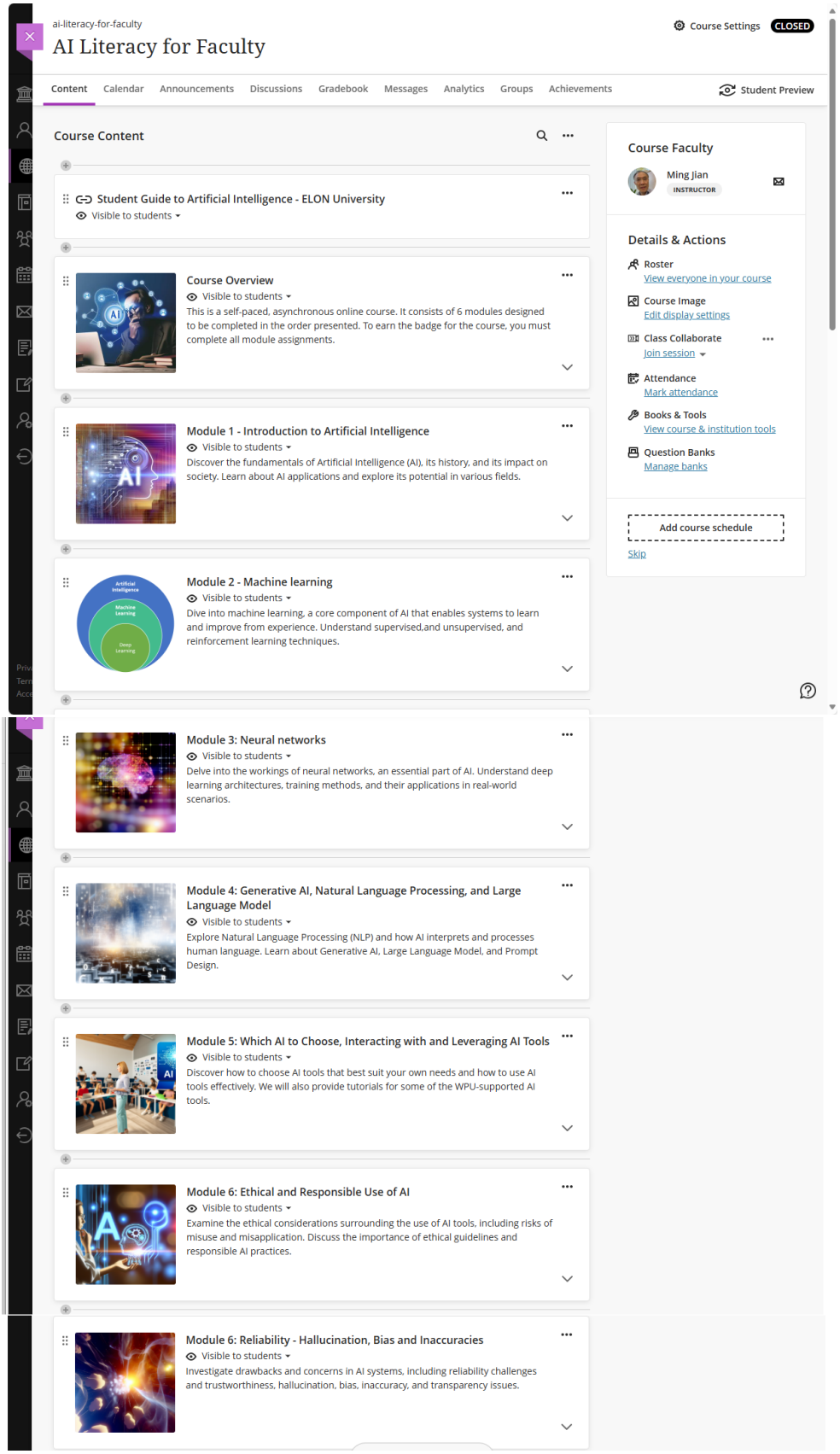
- Module 4 Overview
- Natural Language Processing (NLP) Overview
- What Are Large Language Models and How Do They Work?
  - What are Large Language Models
  - How Large Language Models Work
  - How the Model Is Trained
  - Multimodal Large Language Model
- Benefits of Large Language Models in Higher Education Module References

Module 5: AI Tools for Teaching and Research

- Which AI Tools to Choose
- WPU-Supported and Licensed AI Tools
- Crafting Effective PromptsAI Taxonomy
- How to Use AI Tools Effectively – Prompting EngineeringReferences
- Assignments

Module 6: Ethical and responsible use of AI

- • Ethical and Responsible Use of AI Overview
- • Why Does AI Create Hallucination, Bias, and Inaccuracy?
- • Ethical Use of AI for Teaching and Learning
- • Key Points to Consider When Incorporating AI into Teaching


ai-literacy-for-faculty
AI Literacy for Faculty
Course Settings
CLOSED
Content
Calendar
Announcements
Discussions
Gradebook
Messages
Analytics
Groups
Achievements
Student Preview
Course Content
Student Guide to Artificial Intelligence - ELON University
Visible to students
Course Overview
Visible to students
This is a self-paced, asynchronous online course. It consists of 6 modules designed to be completed in the order presented. To earn the badge for the course, you must complete all module assignments.
Module 1 - Introduction to Artificial Intelligence
Visible to students
Discover the fundamentals of Artificial Intelligence (AI), its history, and its impact on society. Learn about AI applications and explore its potential in various fields.
Module 2 - Machine learning
Visible to students
Dive into machine learning, a core component of AI that enables systems to learn and improve from experience. Understand supervised,and unsupervised, and reinforcement learning techniques.
Module 3: Neural networks
Visible to students
Delve into the workings of neural networks, an essential part of AI. Understand deep learning architectures, training methods, and their applications in real-world scenarios.
Module 4: Generative AI, Natural Language Processing, and Large Language Model
Visible to students
Explore Natural Language Processing (NLP) and how AI interprets and processes human language. Learn about Generative AI, Large Language Model, and Prompt Design.
Module 5: Which AI to Choose, Interacting with and Leveraging AI Tools
Visible to students
Discover how to choose AI tools that best suit your own needs and how to use AI tools effectively. We will also provide tutorials for some of the WPU-supported AI tools.
Module 6: Ethical and Responsible Use of AI
Visible to students
Examine the ethical considerations surrounding the use of AI tools, including risks of misuse and misapplication. Discuss the importance of ethical guidelines and responsible AI practices.
Module 6: Reliability - Hallucination, Bias and Inaccuracies
Visible to students
Investigate drawbacks and concerns in AI systems, including reliability challenges and trustworthiness, hallucination, bias, inaccuracy, and transparency issues.
Course Faculty
Ming Jian
INSTRUCTOR
Details & Actions
Roster
View everyone in your course
Course Image
Edit display settings
Class Collaborate
Join session
Attendance
Mark attendance
Books & Tools
View course & institution tools
Question Banks
Manage banks
Add course schedule
Skip

In response to the growing needs of integrating Generative AI (GenAI) at WPU, a series of professional development webinars and presentations were offered to equip faculty with the knowledge, skills, and strategies necessary to effectively incorporate AI tools into their teaching practice. These sessions provided both foundational understanding and practical guidance, addressing key topics such as selecting appropriate AI tools, crafting effective prompts, leveraging AI for instructional design, and navigating ethical and academic integrity considerations.

The webinar series included sessions such as *"Which AI to Choose?"* and *"Crafting Effective AI Prompts for Instructors"*, designed to help faculty make informed choices and maximize the pedagogical impact of AI. Practical applications and innovative tools were further explored in sessions like *"Create GPTs for Teaching and Learning"* and *"AI Features in Adobe Products (FireFly and Photoshop)"*, while institutional productivity tools were covered in *"How to Use Microsoft Copilot"* and *"How to Use Zoom AI Companion"*.

In addition to the webinars, faculty engagement was extended through targeted presentations at Provost Office and Writing Across the Curriculum events, including *"Enhancing Teaching with AI: Practical Application"* at the *What Works for Students* conference and *"Overview of AI Tools"* at the *AI Pedagogy Sandbox Webinar*. These initiatives were designed to build faculty confidence, encourage responsible and innovative use of AI in teaching, and foster a campus-wide culture of digital literacy and pedagogical innovation.

- **Webinars and Workshops**
  1. Which AI to Choose? (10/8/2024)
  2. Crafting Effective AI Prompts for Instructors (11/6/2024)
  3. Effective Approaches for Addressing AI-Assisted Cheating (12/4/2024)
  4. Create GPTs for Teaching and Learning (2/28/2025)
  5. AI Features in Adobe Products (FireFly and Photoshop) (5/31/2025)
  6. How to Use Microsoft Copilot (3/31/2025)
  7. How to use Zoom AI Companion (4/30/2025)

- **Presentations**
  1. Enhancing Teaching with AI: Practical Application, at the provost's "What Works for Students" conference (12/16/2024)
  2. Overview of AI Tools" at the "AI Pedagogy Sandbox Webinar" organized by the Writing Across Curriculum (March 7, 2025)

  (https://wpunj.zoom.us/rec/share/vrKNudq1nfGxIrs8xiw5irKrTukS8mQQo-wFH2k4gNDfyVq0WS9KvdUHIjlxU4B_.-AJH8Spr1Ddgn1Cj Passcode: ?6KVWkd8)

EXTENDED REALITY in TEACHING

REDEFINING TEACHING AND LEARNING WITH XR

OBJECTIVES

- Design and deliver hands-on workshops and webinars on Extended Reality (XR).
- Prepare a comprehensive report on "XR Integration into the Curriculum."
- Collaborate with academic departments to engage faculty in designing and implementing pilot XR projects in their classrooms.
- Complete training sessions on XR content creation tools and platforms, including Sketchfab, Blender, and Adobe Aero.
- Develop "XR in Teaching" guidelines (a booklet) to support the effective use of Extended Reality in teaching at WPU.
- Create promotional materials—such as email campaigns, digital flyers, and website updates—to highlight the benefits of XR technologies.
- Benchmark best practices for integrating XR technologies into higher education.
- Provide consultation services to guide faculty on incorporating XR into their teaching practices.
- Develop a project plan for offering XR content development services to the WPU community.
- Conduct research on the applications of Virtual Reality (VR), Augmented Reality (AR), and Extended Reality (XR) in higher education settings.

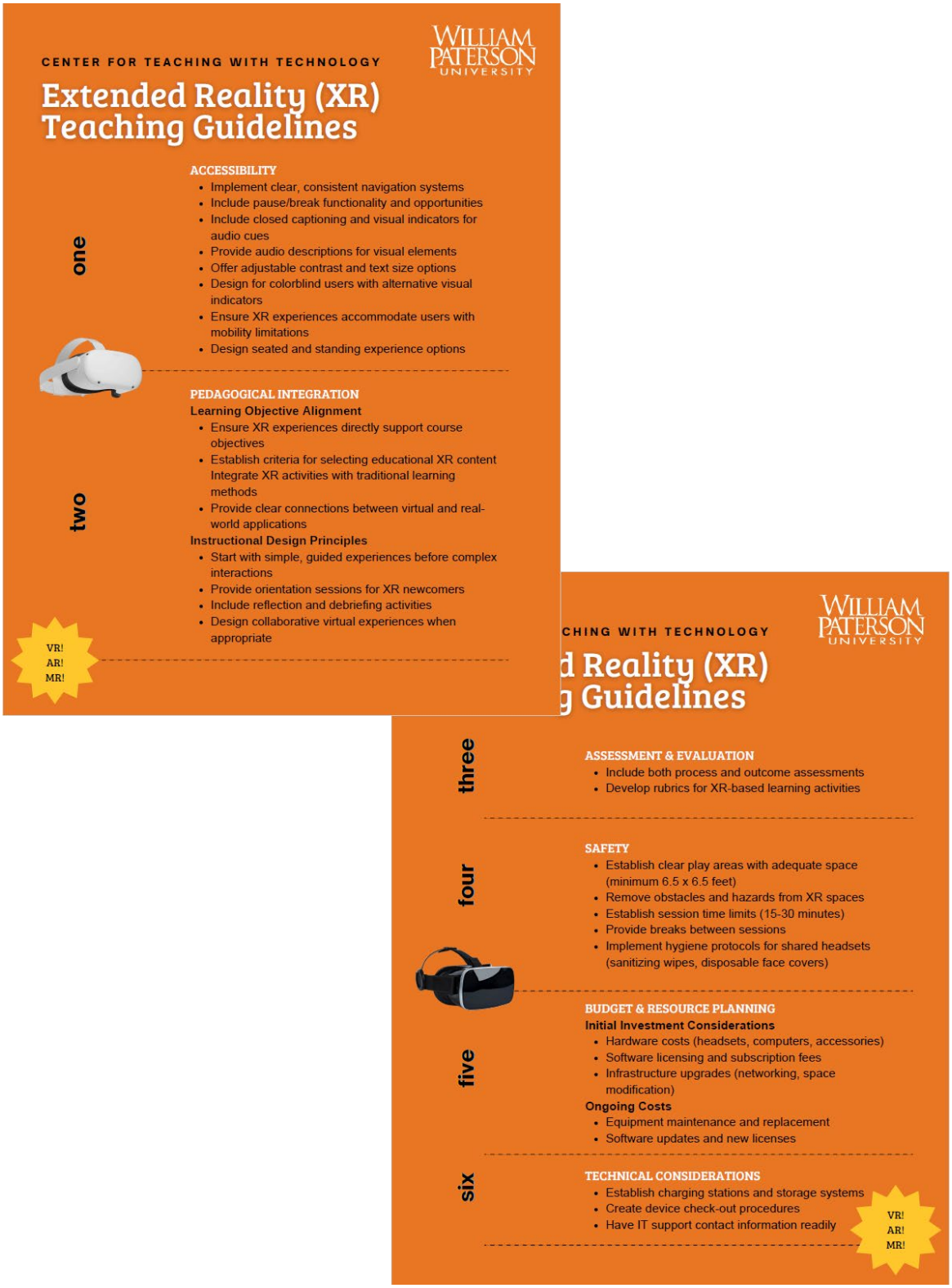
ACHIEVEMENTS

As emerging technologies continue to reshape teaching and learning in higher education, the integration of Extended Reality (XR) in teaching has become increasingly important for enhancing instructional practice and student engagement. To support faculty and students in effectively navigating these tools, CTT conducted research on impactful use of XR technologies at William Paterson University.

CTT specifically focused on developing hands-on workshops and webinars that provided faculty with practical experience in XR and creating two reports to guide faculty for classroom implementation – "XR Integration into the Curriculum" and "XR in Teaching Guidelines." These initiatives contributed to empower faculty and students to leverage XR technologies to enhance learning experiences, develop digital literacy, and foster innovation in teaching.

- **XR Teaching Guidelines**

  XR Teaching Guidelines | XR Teaching Guidelines (Research)



- **Benchmarking Reports**

  XR Open House Report – Stevens University

REPORT ON VISIT TO THE XR LAB AT STEVENS INSTITUTE OF TECHNOLOGY

Date of Visit: Tuesday, April 1, 2025
Location: XR Lab, Samuel C. Williams Library, Lower Level, Stevens Institute of Technology
Attendee: Sena Bulak

Summary

On April 1, 2025, I attended the XR Lab Faculty Open House at Stevens Institute of Technology. The event provided an in-depth look into the lab's mission, operations, and collaborative efforts with faculty to integrate extended reality (XR) technologies into education. I met with Valerie Dumova, Manager of Instructional Design and Immersive Learning, and Wei Li, Associate Director of Learning Technology, who offered valuable insights into the lab's initiatives.
The XR Lab established in 2019, offering faculty and students access to cutting-edge XR technologies, including virtual reality (VR), augmented reality (AR), and mixed reality (MR). The lab's mission is to explore how XR can enhance learning, research, and pedagogical goals across various disciplines. They also have a student XR Lab Support Specialist to assist maintaining the lab.

Faculty Engagement & the DICE Method

Currently, 25–30 faculty members are actively working with XR in their teaching. The XR Lab uses a structured outreach approach, connecting individually with faculty to explore how XR might enhance their teaching practices.
A key framework guiding these conversations is the DICE method, which helps identify suitable educational use cases for XR. The acronym stands for:

- D – Dangerous: Scenarios that would be too hazardous to perform in real life (e.g., chemical spills, emergency response training).
- I – Impossible: Experiences that cannot be replicated in reality (e.g., traveling inside a human cell or visiting Mars).
- C – Counterproductive: Situations where traditional methods hinder learning or engagement (e.g., passive lectures where active exploration would be better).
- E – Expensive: Scenarios that are prohibitively costly to conduct physically (e.g., building physical prototypes or conducting field trips).

If a faculty member's instructional challenge fits into one or more of these categories, the lab initiates a collaborative development process.

Implementation Process

Once a faculty member expresses interest, the XR Lab team researches and identifies a suitable XR content vendor. The lab covers the cost of a trial—including content licensing and device setup—and schedules faculty practice sessions in the lab. Instructional designers collaborate with the faculty member to develop activities and assessment strategies for classroom integration. If the solution proves viable and the faculty member wishes to proceed, their department assumes the remaining cost, while the XR Lab continues providing technical support.

XR Lab Equipment

- Meta Quest 3 and Meta Quest 2 headsets
- Microsoft HoloLens 2
- HTC Vive Pro 2
- VR-ready development computers

Faculty Showcase Highlights

The XR Lab hosts annual Faculty Showcase events to highlight successful XR integrations:
2024 Showcase: Dr. Thomas Lonon (School of Business) and Dr. Alyssa Hensley (Chemical Engineering and Materials Science) shared their experiences with XR in teaching. Additionally, Dr. Alexandre G. de Siqueira from the University of Florida discussed his course, "Virtual Reality for the Social Good," where students use VR to address real-world challenges.
2023 Showcase: Dr. Pin-Kuang Lai and Dr. Denver Baptiste presented their incorporation of VR into instruction, detailing the impact on student learning and best practices for using immersive technologies.
2022 Showcase: On April 21, 2022, Dr. Paola DiMarzio (Department of Chemistry and Chemical Biology) and Dr. Biruk Gebre (Department of Mechanical Engineering) shared how they incorporated XR into their Fall 2021 courses. In collaboration with the Division of Information Technology's XR Lab, they successfully piloted the use of XR technology in their courses, impacting over 120 students.

- **Liaison Reports**

  Chemistry Department

REPORT ON VISIT TO THE CHEMISTRY DEPARTMENT

Date of Visit: Tuesday, May 6, 2025
Location: Chemistry Department Chairperson's Office
Attendee: Sena Bulak

I met with the Head of the Chemistry Department to explore potential applications of extended reality (XR) in chemistry instruction. During our meeting, I demonstrated several XR examples, including a virtual reality (VR) chemistry lab, 3D educational videos, and visualizations, low-cost and free applications available on VivePort, a 3D video virtual lab developed by North Carolina University, which includes interactive prompts.

While he appreciated the intent, the department head found the low-cost tools too simplistic and not robust enough for higher education-level coursework. He also expressed concerns about using VR labs due to trust and accuracy issues, as chemistry is a complex discipline that requires detail orientation and hands-on practice. Additionally, because all chemistry courses are conducted in person, he did not find much value in using video-based XR content.

However, he did express interest in using XR for 3D visualization of complex topics, such as molecular biology and chemical structures, chemical bonding and reaction mechanisms, dynamic simulations of molecular motion and interactions, crystallography and lattice structures, electron orbitals and quantum chemistry visualizations. These types of visualizations are common in advanced chemistry education, where students must understand spatial and dynamic aspects of molecules, often beyond what static 2D images can convey. Tools like Chem3D, Avogadro, MoleculAR, and Nanome are frequently used to visualize molecular geometry, simulate reaction pathways, and explore chemical interactions in 3D space. XR technologies could extend these capabilities by allowing students to manipulate molecules in immersive environments and collaboratively explore abstract chemical processes.

He showed me how they currently use Chem3D Draw, and this helped clarify the functionality expected from any tool integrated into their curriculum. He also offered to let me observe one of their classes to gain a clearer understanding of content alignment and instructional needs.
I informed him about the Immersive Lab, including available hardware and software, as well as our team's ability to support pilot testing and instructional design for XR experiences.

Next Steps:

1. I will research and share examples of XR-based molecular visualization tools and case studies demonstrating meaningful integration of XR in chemistry education.
2. I will identify and evaluate software that allows students to build, manipulate, and simulate chemical structures and reactions, such as Nanome and MEL Chemistry VR
3. I will coordinate with the department to arrange a class visit to better understand their instructional approach and content needs if they are interested.
4. I will remain available to support pilot projects, offer consultations, and collaborate on XR content development through the Immersive Lab.

The department head was open-minded and receptive to ideas, emphasizing that faculty are technologically savvy, but that success depends on selecting the right tools to ensure instructional value and efficiency.

- **Liaison Reports**

  Biology Department – William Paterson University (Sena Bulak)

10/3/25, 1:22 PM Exploring Immersive Technologies for Biology Courses - Bulak, Sena - Outlook

Outlook

Exploring Immersive Technologies for Biology Courses

From Bulak, Sena <bulaks@wpunj.edu>
Date Wed 4/30/2025 9:55 AM
To Peek, Michael <PeekM@wpunj.edu>

1 attachment (4 MB)
image.PNG;

Hi Dr. Peek,

I hope you're doing well!

I'm reaching out from the Center for Teaching with Technology (CTT) to share an exciting opportunity to explore how immersive technologies, such as virtual reality (VR), augmented reality (AR), and 360° video, can support teaching and learning in the Biology Department. These tools are increasingly used in biology education across higher ed and are backed by a growing number of best practices.

We use the **DICE framework** to help identify when immersive technologies are the right fit. Specifically, we ask faculty: Is there a topic you teach that's difficult to demonstrate, simulate, or practice—because it's too **D**angerous, **I**mpossible, **C**ounterproductive, or **E**xpensive to do in a traditional classroom?

We'd love to connect with you and your faculty to learn more about the courses offered in biology and explore whether XR (extended reality) could help enhance student understanding and engagement.

Faculty won't need to navigate the process alone, our team at the Immersive Lab and CTT is here to help with idea development, instructional design, equipment access, and piloting support.

If you're interested, have questions, or would like to schedule a brief conversation, I'd be happy to set that up.

Warm regards,
Sena Bulak
Instructional Designer | Center for Teaching with Technology
William Paterson University

- **Liaison Reports** (Continued)
  Biology Department – William Paterson University (Sena Bulak)

- **Liaison Reports**

  Nursing Department – William Paterson University (Sena Bulak and Jae Kim)

Extended Reality Project in Nursing Department

Background

Nursing Department is taking opportunities for exploring Immersive Technology Experiences to connect their academic and career goals. While Minerva, associate dean of College of Science and Health, is waiting for the approval of grants, she and Daria have reached out IRT to inquire what is available and what IRT can assist them to move forward with this idea for that will give enormous benefits for students in building professional skills, exploring emergency medicine with case studies.

What equipment do we have for checkout?

Name	Oculus* Quest 2 (Tethered) Meta compatible ---------- $500 for Quest 3 $1000 for Quest pro (eye tracking) *Oculus was acquired by Facebook in 2014	HTC XR Elite (Tethered/ Stand alone) Equivalent to Oculus Quest	Oculus* Rift (Tethered) Oldest (Not using anymore)	HP G2 Omnicept (Tethered)	HTC vive pro 2 (Immersive room) Dell support as business model
Image					
Screen Quality	HD	4K	HD	4K	4K
Quantity	1	1	3	1	1
Body tracker(s) (USB device)		Biometric/facial tracking Body tracking		Biometric/facial tracking	Body tracking
Wirelessly multiple students can access?	Possible (4 user environment?)	Possible (4 user environment?)			
Applications Apps Websites Subscriptions	UbiSim.com Steam Library Oxford Medical Simulation (OMS) SimX	Steam Library Vive library			Steam Library Vive library Unlimited Premium software included
Settings or Configuration for usage	Cloud based not additional configuration required				Hardware dependent
Availability for Checkout	Faculty only				
Supporting Staff	Chris & Jessica (User services?)				
	Most likely one or two students are using the device while all others are watching a big screen TV	Constraints: Is it safe to use the device in the classroom setting?	Liability issue – the person who checked out the device is fully responsible for fixing and replacement of the device	Let them use the demo program for 30 days along with one of the devices for Nursing	

- **Liaison Reports** (continued)

  Nursing Department – William Paterson University (Sena Bulak and Jae Kim)

Extended Reality Project in Nursing Department (continued)

Common VR Practices in Nursing

1. **Simulated Patient Care -** Virtual Clinical Simulations allow students to interact with virtual patients in realistic clinical scenarios. Examples include managing chronic diseases, administering medications, and responding to emergencies. Some of these simulations give real-life feedback by including AI to guide students through correct or incorrect actions, helping reinforce learning.
2. **Anatomy and Physiology -** 3D Anatomy Exploration allows students to explore human anatomy in 3D, helping them visualize body systems more effectively than with textbooks or 2D images. This immersive exploration enhances understanding of how organs, muscles, and bones work together.
3. **Skills Training and Practice -** Procedural Training: VR is used to simulate nursing procedures like inserting IVs, catheterizations, wound care, and more. This allows students to practice and perfect their skills before working on actual patients.
4. **Immersive Lab Training** - Nursing students can practice using medical equipment, patient positioning, and proper hygiene techniques in a virtual lab environment. This also includes learning to operate under time constraints or stress and simulating real-life pressure.

VR Companies for Nursing Content

Oxford Medical Simulation (OMS): This company offers a range of VR simulations designed for nursing and healthcare professionals. Their VR scenarios include acute care, chronic disease management, and mental health. They provide immersive simulations for developing clinical reasoning, communication, and patient management skills.

SimX: SimX provides virtual reality simulations for medical training, including nursing. Their platform offers a wide range of scenarios such as trauma care, patient assessment, and chronic disease management. They allow customization of scenarios to fit specific learning objectives.

UBISim is a highly specialized platform dedicated to immersive VR training specifically for nursing education. It focuses on providing nursing students with realistic, interactive simulations that enhance clinical skills, patient communication, and decision-making in a safe, virtual environment.

Body Interact: This platform provides virtual patient simulations for nursing and medical students. It allows students to make real-time decisions and see the outcomes. They offer training for acute care, emergency response, and chronic conditions.

Laerdal Medical: Known for their physical mannequins and simulation equipment, Laerdal also offers digital solutions that include VR simulations. Their focus is on improving patient outcomes through immersive, realistic training for healthcare professionals.

Health Scholars: Health Scholars offers VR training specifically tailored for healthcare professionals. Their nursing-specific VR simulations include scenarios in obstetrics, emergency care, and patient safety. They also provide training in crisis management and team-based scenarios.

Kognito: This platform focuses on virtual role-playing scenarios where nursing students can engage in conversations with virtual patients. This includes mental health, substance abuse, and chronic illness management. Their simulations help develop patient communication skills.

Labster: Though Labster is primarily focused on the sciences, they offer some nursing-related VR content, especially in human physiology and medical care training. Their immersive simulations allow for real-time experimentation and learning in a safe virtual environment.

VictoryXR is a well-known provider of immersive educational content, primarily focusing on virtual and augmented reality (VR/AR) experiences for various fields, including healthcare and nursing education.

Embodied Labs: This platform provides immersive, interactive VR experiences aimed at helping healthcare workers, including nursing students, understand the experiences of patients with various health conditions. Their content focuses on empathy and patient care training, covering areas like dementia and end-of-life care.

The Virtual Reality Medical Center: This platform offers a broad range of medical simulations, including content designed for nursing students. Their focus includes clinical skill training and patient interaction simulations.

Low-cost VR Platforms

VivePort: Offers a variety of free and paid for software but is only available for use in the Vive headset. WPU has a subscription. Some Nursing apps in Viveport include Human Anatomy VR, The Body VR: Journey Inside a Cell, 3D Organon VR Anatomy, Engage VR, Sharecare VR, Mindshow (for Empathy Training), Nanome (for Pharmacology).

Steam: Applications on Steam are created by both independent and established developers, so the headset compatibility varies depending on the application. May have content for Nursing.

Oculus Store: Offers a variety of free and paid for software but is only available for use with Meta VR hardware. Apps on the Oculus store are available for standalone or tethered use. May have content for Nursing.

- **Liaison Reports**

  Nursing Department – William Paterson University (Sena Bulak and Jae Kim)

Extended Reality Project in Nursing Department (continued)

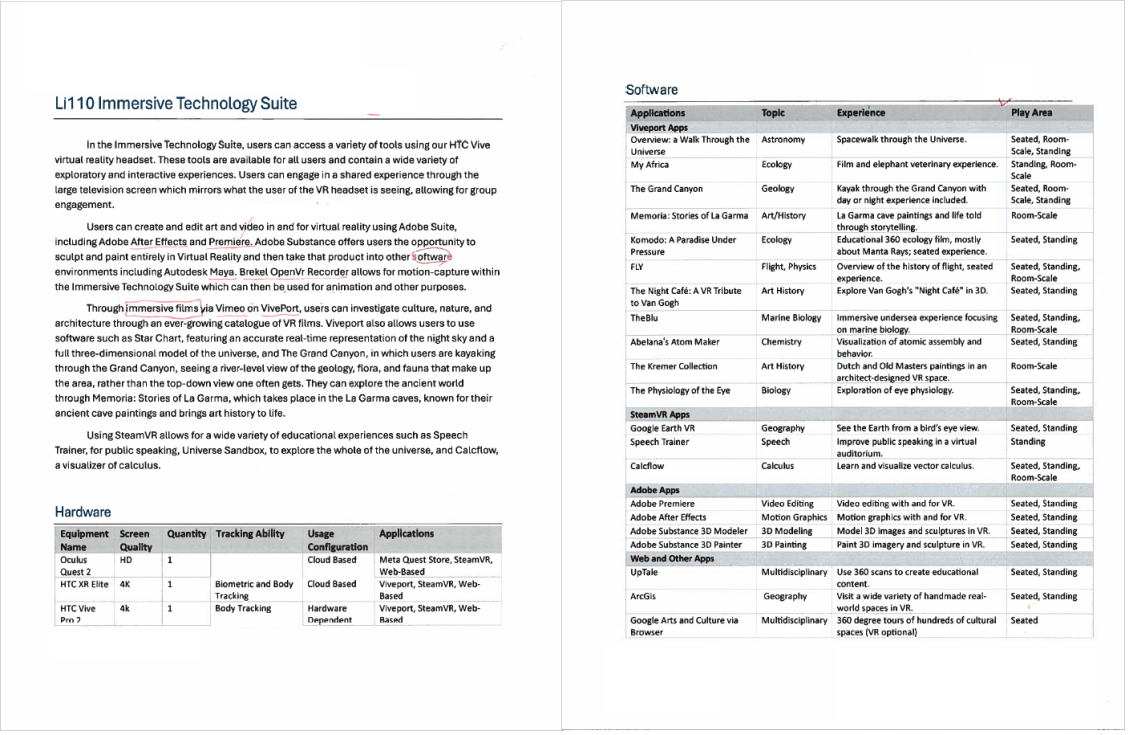
Custom Solutions for Nursing Schools

If your institution requires bespoke VR content for nursing, there are companies that specialize in creating custom VR simulations based on specific curriculums. Companies like Immerse or VR Vision develop tailored simulations for healthcare institutions.

Examples

3D Modeling: Virtual Heart - Stanford Medicine
360 video Training: Anesthesiology -University at Buffalo
Simulation-Based Training: Patient Care and Treatment -Oxford University

Li110 Immersive Technology Suite (Faculty Guide) – Jess Dutschmann



Li110 Immersive Technology Suite

In the Immersive Technology Suite, users can access a variety of tools using our HTC Vive virtual reality headset. These tools are available for all users and contain a wide variety of exploratory and interactive experiences. Users can engage in a shared experience through the large television screen which mirrors what the user of the VR headset is seeing, allowing for group engagement.

Users can create and edit art and video in and for virtual reality using Adobe Suite, including Adobe After Effects and Premiere. Adobe Substance offers users the opportunity to sculpt and paint entirely in Virtual Reality and then take that product into other software environments including Autodesk Maya. Brekel OpenVr Recorder allows for motion-capture within the Immersive Technology Suite which can then be used for animation and other purposes.

Through immersive films via Vimeo on VivePort, users can investigate culture, nature, and architecture through an ever-growing catalogue of VR films. Viveport also allows users to use software such as Star Chart, featuring an accurate real-time representation of the night sky and a full three-dimensional model of the universe, and The Grand Canyon, in which users are kayaking through the Grand Canyon, seeing a river-level view of the geology, flora, and fauna that make up the area, rather than the top-down view one often gets. They can explore the ancient world through Memoria: Stories of La Garma, which takes place in the La Garma caves, known for their ancient cave paintings and brings art history to life.

Using SteamVR allows for a wide variety of educational experiences such as Speech Trainer, for public speaking, Universe Sandbox, to explore the whole of the universe, and Calcflow, a visualizer of calculus.

Hardware

Equipment Name	Screen Quality	Quantity	Tracking Ability	Usage Configuration	Applications
Oculus Quest 2	HD	1		Cloud Based	Meta Quest Store, SteamVR, Web-Based
HTC XR Elite	4K	1	Biometric and Body Tracking	Cloud Based	Viveport, SteamVR, Web-Based
HTC Vive Pro 2	4k	1	Body Tracking	Hardware Dependent	Viveport, SteamVR, Web-Based

Software

Applications	Topic	Experience	Play Area
Viveport Apps			
Overview: a Walk Through the Universe	Astronomy	Spacewalk through the Universe.	Seated, Room-Scale, Standing
My Africa	Ecology	Film and elephant veterinary experience.	Standing, Room-Scale
The Grand Canyon	Geology	Kayak through the Grand Canyon with day or night experience included.	Seated, Room-Scale, Standing
Memoria: Stories of La Garma	Art/History	La Garma cave paintings and life told through storytelling.	Room-Scale
Komodo: A Paradise Under Pressure	Ecology	Educational 360 ecology film, mostly about Manta Rays; seated experience.	Seated, Standing
FLY	Flight, Physics	Overview of the history of flight, seated experience.	Seated, Standing, Room-Scale
The Night Café: A VR Tribute to Van Gogh	Art History	Explore Van Gogh's "Night Café" in 3D.	Seated, Standing
TheBlu	Marine Biology	Immersive undersea experience focusing on marine biology.	Seated, Standing, Room-Scale
Abelana's Atom Maker	Chemistry	Visualization of atomic assembly and behavior.	Seated, Standing
The Kremer Collection	Art History	Dutch and Old Masters paintings in an architect-designed VR space.	Room-Scale
The Physiology of the Eye	Biology	Exploration of eye physiology.	Seated, Standing, Room-Scale
SteamVR Apps			
Google Earth VR	Geography	See the Earth from a bird's eye view.	Seated, Standing
Speech Trainer	Speech	Improve public speaking in a virtual auditorium.	Standing
Calcflow	Calculus	Learn and visualize vector calculus.	Seated, Standing, Room-Scale
Adobe Apps			
Adobe Premiere	Video Editing	Video editing with and for VR.	Seated, Standing
Adobe After Effects	Motion Graphics	Motion graphics with and for VR.	Seated, Standing
Adobe Substance 3D Modeler	3D Modeling	Model 3D images and sculptures in VR.	Seated, Standing
Adobe Substance 3D Painter	3D Painting	Paint 3D imagery and sculpture in VR.	Seated, Standing
Web and Other Apps			
UpTale	Multidisciplinary	Use 360 scans to create educational content.	Seated, Standing
ArcGis	Geography	Visit a wide variety of handmade real-world spaces in VR.	Seated, Standing
Google Arts and Culture via Browser	Multidisciplinary	360 degree tours of hundreds of cultural spaces (VR optional)	Seated

- ## Advancing Classroom Integration of Immersive Technologies

  Sena Bulak

Overview
William Paterson University has an established Immersive Lab that serves as a resource for exploring extended reality (XR) technologies. Building on this foundation, the Center for Teaching with Technology (CTT) aims to significantly expand the use of immersive technologies in teaching and learning across disciplines.

While the lab already supports exploration and experimentation, our goal is to connect XR with intentional pedagogy, aligning immersive tools with faculty needs, instructional design principles, and evidence-based teaching strategies.

Proposed Approach
Our approach will center on engaging faculty and integrating immersive tools strategically into course design. We will raise awareness of the lab and its capabilities through targeted outreach and faculty development, and position XR as a practical teaching solution, especially when traditional methods fall short.

Proposed Method
We will adopt the D.I.C.E. framework (Dangerous, Impossible, Counterproductive, Expensive) to guide use cases where XR provides a clear advantage over conventional approaches.

This initiative places a greater emphasis on instructional design and pedagogical strategy in the Immersive Lab's work, with instructional designers playing a central role in helping faculty translate teaching challenges into immersive solutions.

Proposed Action
We will host targeted outreach campaigns, info sessions, and lab tours to introduce XR possibilities. Additionally, we will cultivate a Community of Practice among faculty, a collaborative environment where educators can share experiences, learn from one another, and build confidence in using immersive technologies effectively.

Proposed Lab Structure
The lab brings together technical expertise, instructional design, and instructional support to guide faculty through the entire XR integration process.

- Instructional Designer: Pedagogical lead supporting activity design, instructional alignment, and student engagement strategies.
- XR Technologist: Leads hardware/software support
- Teaching Assistant: Provides classroom and student-facing support during XR implementation.

XR Implementation
When a faculty member expresses interest in XR, the lab team and the instructional designer will facilitate the process to ensure clear guidance and pedagogical alignment from start to finish:

1. Initial Meeting – The faculty member meets with the instructional designer to discuss their course goals, challenges, and instructional needs. This stage helps identify whether XR is an appropriate solution, using DICE criteria to pinpoint specific moments where immersive tech can enhance or transform learning.

2. Ideation and Pilot Session – Faculty engage in collaborative brainstorming with the lab team to sketch out possible immersive approaches. The lab team supports faculty in finding the content and providing the equipment for the pilot. The Instructional Designer will support the faculty in creating a short XR activity.

3. Implementation – If the faculty decides to use an XR solution, their department will cover the costs for the additional equipment and content license. The lab team will continue to provide technical assistance and instructional design support if needed.

- **Advancing Classroom Integration of Immersive Technologies** (continued)

Peer Institution Models and Best Practices
The strategy outlined for XR implementation at William Paterson University is informed by successful models from peer institutions:

- Stevens Institute of Technology utilizes the DICE framework and emphasizes pedagogical value and course alignment through structured faculty engagement.
- Columbia University focuses on interdisciplinary applications of XR, often integrating immersive tech into research and academic initiatives.
- Rutgers University's IDEA XR Lab creates custom XR experiences tailored to research and instruction, especially in the arts and humanities.
- Seton Hall University supports course-based immersive projects and encourages experimentation with extensive XR infrastructure.

Strengthening Collaboration Between the Immersive Lab and CTT
The Immersive Lab team can work closely with the Center for Teaching and Technology (CTT) to align efforts around faculty support and strategic integration of immersive technologies.

To deepen the pedagogical focus of XR implementations, the designated instructional designer can:

- Be onboarded to XR tools, platforms, and workflows.
- Receive hands-on training with all XR equipment and software.
- Have full access to lab space and systems to support faculty in real time.
- Serve as a bridge between faculty and lab specialists to ensure sound course design.

Shared Resources and Outreach
The Lab and CTT teams can co-create a shared library of:

- Project intake forms
- DICE-aligned course planning templates
- Faculty onboarding materials
- Evaluation rubrics for XR-enhanced learning

They can also plan joint outreach efforts, including:

- XR open house events
- Faculty learning communities or Communities of Practice
- Showcases of successful immersive teaching projects
- Department-specific visits to promote XR tailored to their disciplines

- **Extended Reality in Higher Education** (Sena Bulak)

Overview
This report examines XR implementations across multiple universities by focusing on their infrastructure and technology choices, pedagogical strategies, research initiatives, and institutional strategies. It will also highlight the key XR focus areas of each university, technology trends and platform analysis as well as the future recommendations for WPU.

Seton Hall University
Infrastructure and Technology: Seton Hall has adopted a pragmatic approach to XR implementation that centers their efforts around the Meta Quest Pro platform. Research indicates that over 80% of students and faculty are satisfied with the use of Meta Quest Pro.
Pedagogical Applications: The university has developed a diverse portfolio of VR applications tailored to specific academic disciplines such as:
- History students engage with the Anne Frank House application for immersive historical experiences
- Art program students utilize the Pastel Gallery app for creative exploration
- Cross-curricular applications include "Weather the Storm" for hurricane education and "Notes on Blindness" for empathy-building experiences

Strategic Approach: Seton Hall's strategy emphasizes practical, hands-on educational experiences. Their application selection process prioritizes content that directly supports curriculum objectives while maintaining broad accessibility across different majors.

Rutgers University
Rutgers has positioned itself as a leader in XR research and development, with multiple centers and initiatives driving innovation in immersive technologies.
Infrastructure and Technology: Rutgers maintains multiple XR research labs across campuses, including the Immersive Media Lab and GRID (Game Research and Immersive Design), which provide faculty and students with access to cutting-edge XR tools and experimental spaces. A strong emphasis is placed on interdisciplinary collaboration by bringing together communication, computer science, engineering, and healthcare faculty to co-develop immersive experiences. Rutgers fosters partnerships with industry leaders in XR technology that enables students and researchers to work with the latest hardware and software platforms while also connecting with external collaborators for applied projects. The devices used are Oculus/Meta Quest, HTC Vive.
Research Initiatives at the Immersive Media Lab
- The Immersive Media Lab focuses on presence and embodiment by integrating this research into SC&I's Digital Media Lab course (04:567:331).
- Lab partners with Rutgers Health's SCARLET Lab and the School of Nursing Simulation Center to design medical training simulations for pharmacy, nursing, PA, and medical students.
- Faculty and student teams develop custom XR applications such as immersive anatomy modules, procedural rehearsal tools, and medical acting scenarios tailored to research and teaching needs across disciplines.
- The lab also connects with Rutgers' GRID program, which supports XR across the university and engages external organizations in game design, simulation, and immersive training.

Academic Programs
- Computer Science courses introduce students to VR/AR programming and application development.
- Digital Media programs incorporate immersive storytelling, interactive design, and media theory with hands-on XR projects.
- Engineering programs use XR for simulation, modeling, and visualization to prepare students for careers in technical and applied industries.

University of Michigan
Infrastructure and Technology: The University of Michigan has built one of the most comprehensive XR programs in higher education with XR facilities across multiple campuses. Labs are equipped with diverse hardware including HTC Vive, Oculus Rift, and Microsoft HoloLens, giving faculty and students broad access to immersive tools. A team of technical support staff provides training, maintenance, and consultation for XR projects. Michigan also maintains strong industry partnerships with companies such as Microsoft, HP, Lenovo, Meta (Facebook), and Disney, who have contributed to curriculum design and sponsored XR events.

- **Extended Reality in Higher Education** (continued)

Academic Integration
- Engineering students apply VR for complex system visualization and design modeling.
- Medical students use XR platforms, often in collaboration with GigXR, ApoQlar, AxonPark VR, and Iristick, to practice procedures, rehearse scenarios, and conduct risk-free clinical training.
- Architecture students create and explore 3D building models that strengthen their spatial analysis and design capabilities.
- Psychology researchers employ VR to study human behavior in controlled virtual environments. Vizard and SightLab ared used. The setup is integrated with the Meta Quest Pro headset with eye-tracking, plus physiological monitoring using BIOPAC sensors.
- Michigan also works with Coursera to offer XR-enhanced online courses, broadening access to immersive learning through the Future of Work Academy.

Research Excellence
- The university's XR research explores human-computer interaction and ways to make immersive technologies more intuitive and accessible.
- Faculty lead projects on therapeutic applications by using XR in mental health treatment and rehabilitation with software they created (XR Initiative, XR Clinic, MI2Lab)
- Technical teams contribute to the development of new XR platforms and tools to ensure Michigan is both a leader in applied practice and in advancing the core technology.

Harvard University
Infrastructure and Technology
Strategic Philosophy: Harvard adopts a selective approach to XR, emphasizing quality over quantity by implementing immersive technologies that deliver transformative educational experiences across various disciplines.
Facilities and Equipment: XR projects are distributed across key schools and departments to ensure access to premium hardware and software that support medical, business, and liberal arts applications.
Industry Partnerships: Harvard collaborates with leading industry partners to pilot and test next-generation XR platforms, ensuring that faculty and students work with the most advanced tools available.
Academic Integration
- Harvard Medical School utilizes advanced VR for anatomy education and surgical training, enabling students to safely explore human anatomy and rehearse procedures.
- Harvard Business School incorporates VR into leadership, negotiation, and management simulations, providing students with immersive practice in decision-making and interpersonal dynamics.
- Liberal Arts Curriculum leverages XR environments to enable historical and cultural exploration, allowing students to experience reconstructed spaces and contexts that enrich humanities education.
- Collaborations with external organizations to enhance XR applications in education and training.

Research Excellence
- Computer Science Department leads fundamental research in XR technologies, focusing on developing new technical capabilities and platforms.
- Cross-Disciplinary Collaborations investigates the psychological and social impacts of immersive media, bridging computer science, psychology, and education research.
- Collaborations with industry leaders to co-develop and evaluate emerging XR platforms, ensuring that research advancements translate into practical, scalable tools for teaching and learning.

Northeastern University
Infrastructure and Technology: Northeastern University offers Master of Science in Extended Realities, a comprehensive graduate program offering interdisciplinary skills, theoretical foundations, and technologies essential for creating impactful XR experiences. (Northeastern Grad Programs)
Additionally, they have a lab called Playful Mind focuses on rehabilitation applications using sensor technology to improve the lives of individuals with cognitive and motor challenges. (playfulmind.sites.northeastern.edu)
Reality Design Studio is also a dedicated platform for the development of XR technologies that provides students with hands-on experience in creating immersive environments.

Academic Integration:
Experiential Learning: Students engage in real-world projects through the Playful Mind Lab and Reality Design Studio, applying theoretical knowledge to practical scenarios.
Cross-Disciplinary Approach: The program integrates insights from various fields, including computer science, design, and rehabilitation sciences, to create holistic XR solutions.

- **Extended Reality in Higher Education** (continued)

University of Southern California
Infrastructure and Technology
Neely Center for Ethical Leadership and Decision Making focuses on research and development related to XR technologies, including virtual reality (VR), augmented reality (AR), and mixed reality (MR). (Marshall School of Business) They have a mixed Reality Lab that conducts research in VR and AR that pushing immersive technology out of the lab and introducing it to the public. (Institute for Creative Technologies) They also collaborate with industry partners to develop and refine XR technologies, ensuring that students have access to cutting-edge tools and platforms.

Academic Integration:
- Immersive Design Courses: Courses like CTAN 504L Creative Production in Virtual Reality provide students with hands-on experience in producing both linear cinematic VR short films and associated real-time immersive experiences. (USC Catalogue)
- Therapeutic Applications: The Neely Center explores the psychological and social impacts of immersive media, bridging computer science, psychology, and education research. (neelyxr.org)

Research Excellence:
- Purpose-Driven XR Library: A curated collection of innovative products, services, experiences, and platforms utilizing XR technologies for social good and improving lives. (Marshall School of Business)
- Collaborative Projects: Joint efforts between students and professors in the Extended Reality Lab to create VR, AR, and XR experiences, environments, and educational tools. (USC Dornsife)

Penn State University
Infrastructure and Technology:
Virtual/Augmented Reality (VAR) Lab works with students, the community, and industry partners to implement AR and VR solutions, enhancing education and industry practices. Additionally. Smartphone App Development like "Serene," a mental health resource and mindfulness app, to provide accessible XR experiences. (Penn State Behrend)
Academic Integration:
- Cross-Curricular Integration: Incorporation of XR technologies into various disciplines, including biology, psychology, and English, to enhance learning experiences.
- Workplace Training: Utilization of XR for recreating historically important venues and addressing training gaps in the workplace. (Virtual/Augmented Reality (VAR) Lab)

Research Excellence:
- Community Engagement: The VAR Lab collaborates with local communities to implement XR solutions that address real-world challenges.
- Innovative Applications: Development of XR applications that bridge educational and workplace gaps, providing immersive learning and training opportunities

Devices, Software and Partnerships

University	Devices / Hardware	Software / Platforms	Industry Partnerships
Seton Hall	Meta Quest Pro (primary platform)	Oculus Store apps (Anne Frank House, Pastel Gallery, Weather the Storm, Notes on Blindness)	Content partnerships with educational XR developers (specific vendors not named)
Rutgers	Meta Quest headsets, HoloLens, 360° video and XR capture tools	Custom XR apps developed in Immersive Media Lab, GRID projects for simulation and gaming, Courses use Unity/Unreal for XR	Collaborations with healthcare programs (Rutgers Health, SCARLET Lab, School of Nursing), External XR industry partnerships
Michigan	HTC Vive, Oculus Rift, Microsoft HoloLens, Meta Quest, Other XR peripherals (360° cameras, sensors)	Unity, Unreal Engine, Coursera XR modules, Vizard + SightLab (psych research), Medical XR apps via GigXR, ApoQlar, AxonPark, Iristick	Microsoft, HP, Lenovo, Meta, Disney, GigXR, ApoQlar, AxonPark, Iristick, Coursera (Future of Work Academy)
Harvard	HTC Vive, Oculus Go, Valve Index, Microsoft HoloLens 2, Immersive CAVE, 360° capture tools	Unity, Unreal Engine, Adobe Medium, Gravity Sketch, Tilt Brush, Mozilla Hubs, Spatial.io, BigscreenVR, Custom apps for Med School, Business School, Liberal Arts	Collaborations with XR platform developers (partners not always public), Partnerships tied to Med, Business, CS initiatives
Northeastern	Meta Quest headsets, Other XR kits in Reality Design Studio	Custom XR apps (rehab & design), Unity, Unreal Engine in MS XR program	Playful Mind Lab (rehab XR), Reality Design Studio, Partnerships with XR companies for internships & placements
USC	HTC Vive, Oculus/Meta devices, Mixed Reality Lab equipment	Creative production tools (Unity, Unreal), CTAN 504L VR production pipeline, Purpose-Driven XR Library	Neely Center for Ethical Leadership & Decision Making, Institute for Creative Technologies, Media/entertainment industry collaborations
Penn State	Meta Quest headsets, 360° cameras, Mobile devices for XR apps	Custom VAR Lab apps (e.g., Serene mental health app), Unity, Unreal Engine for curricular projects	Local community and industry collaborations, VAR Lab outreach projects

- **Extended Reality in Higher Education** (continued)

Key XR Focus Areas

University	Medical XR	Engineering and Technical XR	Humanities and Cultural XR	Strengths
Seton Hall University			✅	Strong hands-on, cross-curricular applications (e.g., Anne Frank House, Pastel Gallery, Notes on Blindness)
Rutgers University	✅	✅		Interdisciplinary labs (Immersive Media Lab, GRID); medical simulations; custom XR tools; Digital Media storytelling
University of Michigan	✅	✅	✅	Full XR integration across disciplines; medical, engineering, architecture, psychology; strong industry partners
Harvard University	✅		✅	Selective, quality-first approach; VR in medical, business, and liberal arts; strong research focus
Northeastern University	✅	✅		Graduate MS in XR; Playful Mind Lab (rehabilitation); Reality Design Studio; industry partnerships
University of Southern California (USC)	✅	✅	✅	Mixed Reality Lab and Neely Center; immersive design courses; therapeutic & cultural XR projects
Penn State Behrend	✅		✅	VAR Lab; cross-curricular integration; smartphone apps for accessibility; workplace-focused XR

Technology Trends and Platform Analysis

Category	Details
Hardware Preferences	Meta Quest series (Quest 2, Quest 3, Quest Pro) dominates due to ease of use and cost-effectiveness. Microsoft HoloLens 2 preferred AR applications requiring precision. Specialized equipment (GoPros, 360° cameras) used for content creation.
Software Ecosystems	Steam VR for gaming and entertainment applications. Oculus Store for educational content. Custom applications developed in-house or through partnerships. Web-based platforms for broader accessibility.
Learning Outcomes	Increased student engagement and motivation. Improved retention of complex concepts. Enhanced spatial understanding. Development of technical skills relevant to emerging industries.
Faculty Adoption	Comprehensive training programs. Ongoing technical support. Collaborative development opportunities. Recognition and incentive systems
Implementation Challenges	Technical Infrastructure. Maintaining and updating XR equipment requires significant IT resources. Content Development. Creating high-quality educational content is time-intensive and expensive. Faculty Training: Ensuring educators can effectively integrate XR into their teaching. Student Access: Providing equitable access to XR experiences for all students
Mitigation Strategies	Partnerships with technology companies for equipment and support. Collaborative content development across multiple institutions. Comprehensive faculty development programs. Mobile and web-based alternatives for broader accessibility
Strategic Recommendations	Start with clear pedagogical goals rather than technology-first approaches. Invest in faculty development as heavily as in hardware. Develop partnerships with other institutions and industry. Plan for scalability from the beginning. Measure and document outcomes to justify continued investment

Conclusion and Future Recommendations for William Paterson University

As William Paterson University examines the use of Extended Reality (XR) in teaching and learning, progress will depend on integrating technological investment with clear pedagogical planning and continuous evaluation. Insights from leading institutions indicate that XR can facilitate engagement, influence learning outcomes, and support new types of scholarship.

To position WPU at the forefront of XR innovation, I recommend the following roadmap:

- Offer a certificate program in "XR Institute" through CTT, combining hands-on workshops with reflective teaching labs.
- Build a peer-mentoring network where experienced XR instructors coach new adopters best practices.
- Launch 2–3 pilot courses next semester in disciplines with immediate XR relevance
- Integrate pre-/post-learning assessments and focus groups into every pilot to measure engagement, retention, and skill development.
- Partner with the Library's media lab to provide "XR Lesson Kits" that include lesson plans, devices, and technical support.
- Formalize agreements with local tech firms (e.g., Meta, Unity developers) to secure discounted hardware, software licenses, and guest-lecturer opportunities.
- Publish an annual "WPU XR Impact Report" to showcase successes, lessons learned, and budgetary ROI—informing ongoing funding decisions.

INSTRCTIONAL DESIGN

SUPPORTING TEACHING INNOVATION

OBJECTIVES

- Provide support for WP Online Programs as needed.
- Manage the MS Booking site to coordinate and maintain consultations.
- Manage the LibCal site to schedule and maintain webinars and workshops.
- Develop and update consultation and workshop offerings to meet evolving faculty and learner needs.
- Offer one-on-one consultations, webinars, and workshops for faculty on topics such as Online/Hybrid course redesign, Quality Matters, Active Learning, and Online Teaching by meeting with department chairs and faculty, distributing advertising materials, and sending periodic notifications as needed.
- Track and summarize webinar offerings, including topics, number of sessions, faculty attendance, and participant names.

ACHIEVEMENTS

CTT played a vital role in strengthening teaching and learning across online, hybrid, and face-to-face modalities. By providing faculty with up-to-date resources, professional development opportunities, and individualized consultations, instructional design services ensure that courses meet evolving pedagogical standards while leveraging the latest educational technologies. This service directly supported the university's commitment to academic excellence, student engagement, and faculty innovation.

To achieve these objectives, instructional design support encompasses a wide range of activities. These include assisting with WP Online programs, managing scheduling platforms such as MS Bookings and LibCal for consultations and webinars and workshops, and systematically tracking webinar participation and impact. Faculty were offered personalized consultations and group workshops on key teaching areas, including course redesign, Quality Matters Assurance, active learning strategies, and effective online instruction. Additionally, outreach efforts - such as meeting with department chairs, distributing promotional materials, and sending periodic announcements - ensure that faculty remain aware of available services.

- **WP Online Support**

WP Online Courses - Recertification or Renewal of the Course Quality

Provost office requested to initiate the recertifying the WP Online courses by updating and reviewing the quality of the updated courses that were developed 3-5 years ago. According to Quality Matters, once a course earns certification upon meeting QM Standards in a Review for Certification, the certification is valid for three or five years. Recertification reviews are meant for courses that haven't changed significantly since the time of initial certification and will use the same QM Rubric that was used for the initial review. They are available for courses initially reviewed against the QM Higher Ed Rubric or the QM Continuing and Professional Education Rubric. Renewal reviews are essentially entirely new course reviews conducted with the same team composition as the initial review. These reviews are offered at a lower price than the initial review. To facilitate the process of updating and quality review, CTT created the new procedure and shared it with WP Online faculty during the WP Online Retreat.

1. Policy for Recertifying WP Online courses – Overview
2. Policy for Recertifying WP Online courses – Presentation

- Program Director requests faculty assignment to courses via email to CTT (cc'ing the chairs)
- CTT adds faculty to the development Course Shell (New copy of the shell)

- Update the course content
- When done, notify CTT with the updated parts of the course by completing the survey

- Quality Review by CTT *(Only the updated parts will be reviewed)*
- Revise the course as needed
- Send the Report to Provost Office

WP Online Faculty Orientations

- WP Online New Adjunct Orientation (8/20/2025)
- New Faculty Orientation (8/25/2025)

CTT offered 30 to 45-minute webinars to assist faculty members with a variety of topics, including the effective use of Blackboard, online course design, assessment methods, accessibility, pedagogical strategies, Artificial Intelligence, Extended Reality, Quality Matters, and technology tools.

- **Webinars**

CATEGORY BREAKDOWN

- Blackboard Ultra: 13 topics, 106 sessions, 25 participants
- Emerging Technology: 7 topics, 11 sessions, 8 participants
- Technology Tools: 3 topics, 6 sessions, 2 participants
- Instructional Design: 5 topics, 10 sessions, 3 participants

DETAILS OF THE WEBINAR

Name of the Webinar	# Times Offered	# of participants	Names of the participants
Blackboard Q&A	25	3	Ge Zhang Harry Prassakos Diane Silbernagel
Setting Up Ultra Gradebook	16	3	Elizabeth Brown Christina B. McSherry Ron Verdicchio
Creating Tests and Question Banks	12	5	Elizabeth Birge Diane Silbernagel Bahar Ashnai Pixy Ferris Bob Laud
Creating a Course Banner	10	-	-
Explore Blackboard's Date Management Tool: Batch Edit	10	1	Megan Chesin
Integrating Perusall into Blackboard	9	6	Elizabeth Brown Bahar Ashnai Julie Rosenthal Eunsun Park Julie Rosenthal Denise Bellog
Course Analytics: Blackboard's Data Analysis Tool	6	-	-
Using Groups in Blackboard	6	3	Gigi Mohamad Sandra Carnegie Erin Graulich
Uploading Video to Blackboard	6	2	Bahar Ashnai Renee Pevour
Grading and Gradebook in Blackboard Ultra	4	2	Ron Verdicchio Barb Nelson
Respondus LockDown Browser and Monitor	4	1	Cyril S. Ku
Introduction to Quality Assurance	2	-	-
Quality Course Planning	2	1	Diana Peck
Quality Course Development	2	-	-
Internal Quality Matters Review	2	-	-

Details of the Webinar (continued)

Name of the Webinar	# Times Offered	# of participants	Names of the participants
Achievements, Alerts and Progress Tracking	2	-	-
Introduction to VR in Higher Education	2	-	-
Introduction to Augmented Reality in Higher Education	2	-	-
Accessibility	2	2	Thomas Fallace Kencia
Blackboard AI Assistant	1	6	Dr. Betts, Amanda O'Donnell, Robert, Ron Verdicchio, Rosemary Walker, Renee Pevour
Which AI to Choose?	1	-	-
Course Copy in Ultra and Fixing Issues	1	-	-
Creating and Using Rubrics	1	-	-
Crafting Effective AI Prompts for Instructors	1	-	-
Effective Approaches for Addressing AI-Assisted Cheating	1	-	-
Create Custom GPTs for Teaching and Learning	1	2	Elizabeth Brown Bahar Ashnai
Microsoft 365 Copilot Chat	1	1	Linda Salvesen
How to Use Zoom AI Companion	1	-	-
28	**133**	**38**	

KEY INSIGHTS

Most Popular Webinars (by number of offerings):

1. Blackboard Q&A - 25 offerings (3 participants)
2. Setting Up Ultra Gradebook - 16 offerings (3 participants)
3. Creating Tests and Question Banks - 12 offerings (5 participants)

Highest Participation:

1. Blackboard AI Assistant - 6 participants (1 offering)
2. Integrating Perusall into Blackboard - 6 participants (9 offerings)
3. Creating Tests and Question Banks - 5 participants (12 offerings)

Category Performance:

1. Blackboard dominates with 77% of all offerings and 71% of participants
2. Emerging Technology shows high engagement relative to offerings (11 sessions, 8 participants)
3. Instructional Design has lower participation rates

Notable Patterns:

1. 11 webinars (39%) had zero participants despite multiple offerings
2. Blackboard Ultra topics are offered most frequently, but don't always translate to high participation

Engagement Rate:

1. Overall engagement rate: 29% (38 participants out of 133 total offerings)
2. Best performing category by engagement: Emerging Technology

RECOMMENDATIONS FOR NEXT YEAR

Focus on High-Impact, High-Demand Topics:

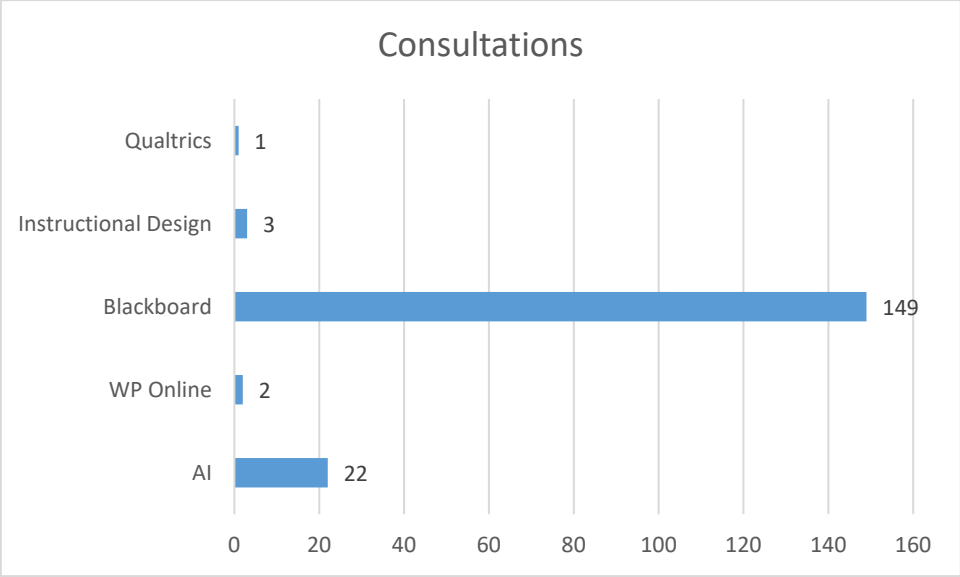
1. Prioritize Blackboard AI Assistant: Only offered once but attracted 6 participants - clear unmet demand
2. Expand Emerging Technology offerings: Best engagement rate suggests strong interest
3. Continue core Blackboard Ultra topics but optimize frequency
4. Eliminate or redesign zero participation webinars

Update the Category Distribution:

1. 40% Blackboard Ultra (core topics only)
2. 35% Emerging Technology (AI focus)
3. 15% Technology Tools (practical applications)
4. 10% Instructional Design (targeted topics)

- **Consultations**

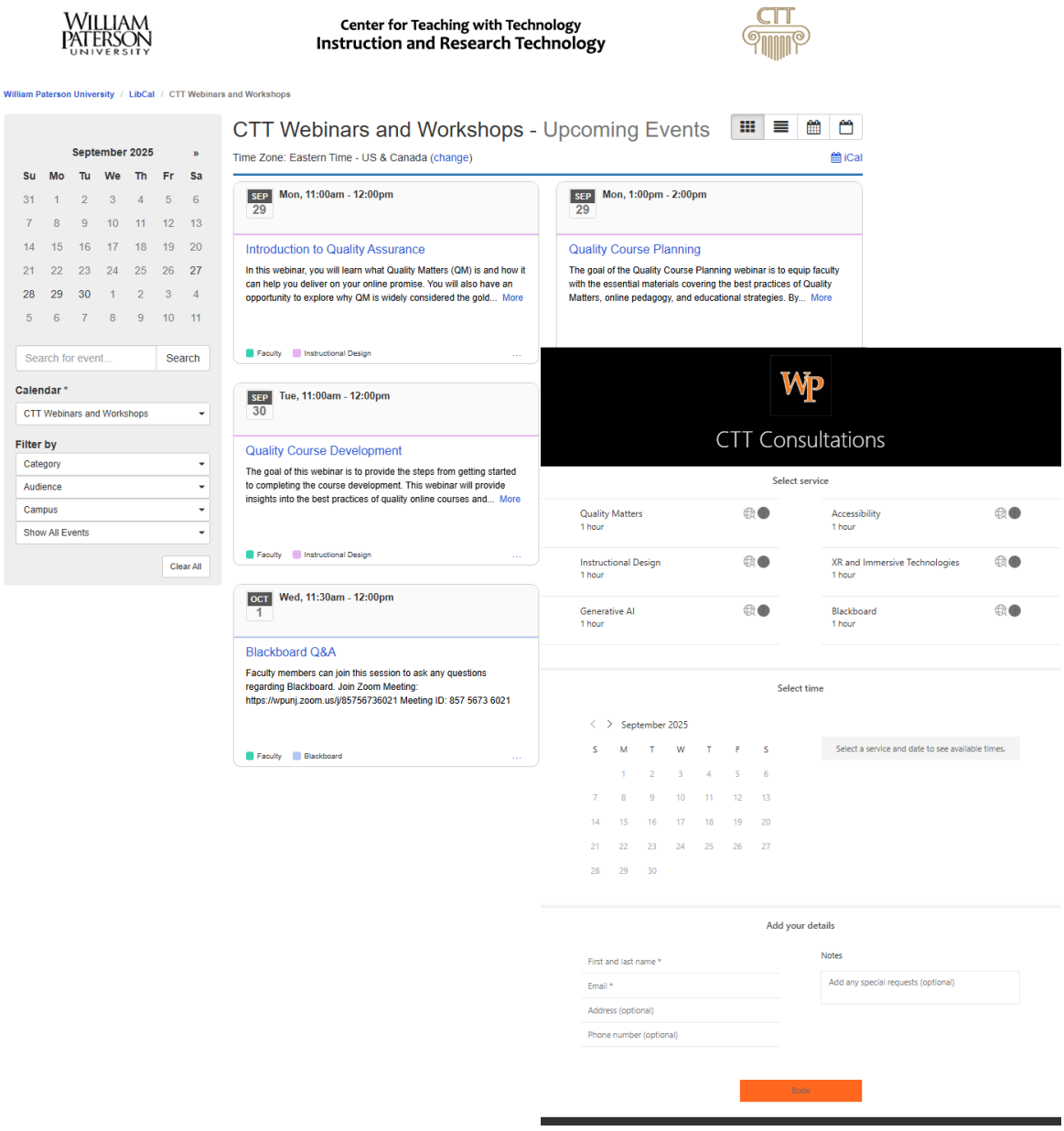
During the AY2025, CTT offered a total of 177 sessions, serving 188 participants across key instructional technology areas. Of these, Blackboard support accounted for 149 sessions (84%), underscoring its position as the most frequently utilized service. Artificial Intelligence workshops represented 22 sessions (12%), while WP Online (2), Instructional Design (3), and Qualtrics (1) collectively comprised the remaining 4%. This breakdown highlights the concentration of demand in Blackboard-related support, alongside a growing interest in emerging technologies such as AI. The data demonstrates that CTT's efforts were strategically aligned with faculty needs, with the majority of resources dedicated to sustaining core teaching technologies while also allocating targeted sessions to innovative areas of growth.



- **Managing MS Booking and LibCal Sites**

To facilitate faculty access to professional development opportunities and instructional support, CTT utilized Microsoft Booking and LibCal applications to manage meeting and registration for each session. These tools provide efficient scheduling and registration process that simplify the management of faculty consultations, webinars, and workshops. By maintaining these tools, CTT ensured that faculty could easily register for events, schedule one-on-one consultations, and received timely confirmations and reminders, reducing administrative barriers and enhancing overall participation.

The use of Microsoft Booking facilitated **individual consultation scheduling**, giving faculty flexible options to select meeting times while ensuring accurate calendar integration and resource management. Meanwhile, LibCal served as the platform for **webinar and workshop registration**, offering faculty an organized way to view upcoming sessions, sign up seamlessly, and track event details. Together, these tools not only improved efficiency in coordinating support services but also enhanced faculty engagement by providing a user-friendly and reliable registration experience. Ultimately, the administration of these tools strengthened the university's ability to deliver responsive, accessible, and well-organized professional development for faculty.



ANALYTICS for STUDENT SUCCESS

TURNING DATA INTO SUCCESS

OBJECTIVES

- Utilize Blackboard's Insight Developer site to collect data and generate reports on Blackboard usage in response to administrative requests.
- Complete the Blackboard Data Explorers online course to develop skills in using SQL queries within Snowflake for generating reports on Blackboard activity.
- Develop supporting documentation to guide faculty in leveraging Blackboard Analytics effectively.

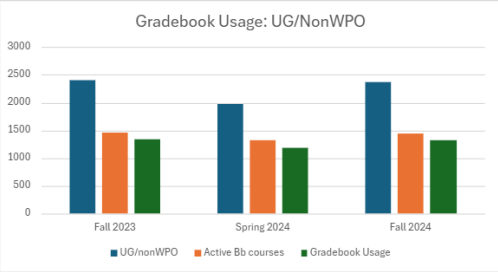
ACHIEVEMENTS

The effective use of learning analytics has become a cornerstone for promoting student success. By leveraging data from Blackboard, faculty and administrators can gain actionable insights into student engagement, course activity, and learning trends, enabling evidence-based decision-making that enhances instructional effectiveness and student outcomes.

- **Use of Snowflake database for retrieving Blackboard Usage**

Academic Success Services requested data on undergraduate main campus course sections to evaluate Blackboard adoption. Their request included: (1) the number of courses with shells visible to students, (2) the subset of those courses actively using the Grade Book, and (3) a detailed roster of courses/sections where possible. This information will be used to assess faculty engagement with Blackboard and inform targeted support strategies. In response to Academic Success Services' request, the Center for Teaching with Technology (CTT) generated a report on undergraduate (UG) main campus course sections from the fall 2023 to Fall 2024 semester. The findings are as follows:

	Fall 2023	Spring 2024	Fall 2024
UG/nonWPO	2405	1976	2369
Active Bb courses	1465	1324	1448
Gradebook Usage	1339	1178	1327
% of UG/nonWPO using GB	56%	60%	56%
% of Active using GB	91%	89%	92%



- **Use of Snowflake database for retrieving Blackboard Usage (continued)**

	Fall 2023	Spring 2024	Fall 2024
UG/nonWPO	2405	1976	2369
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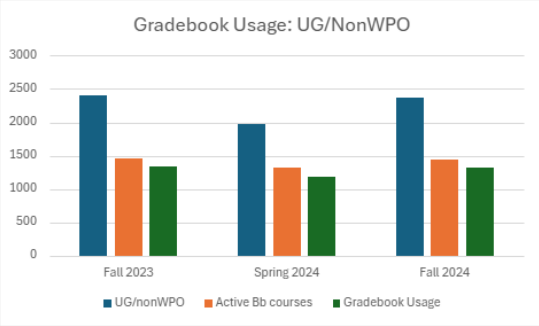


SQL Code

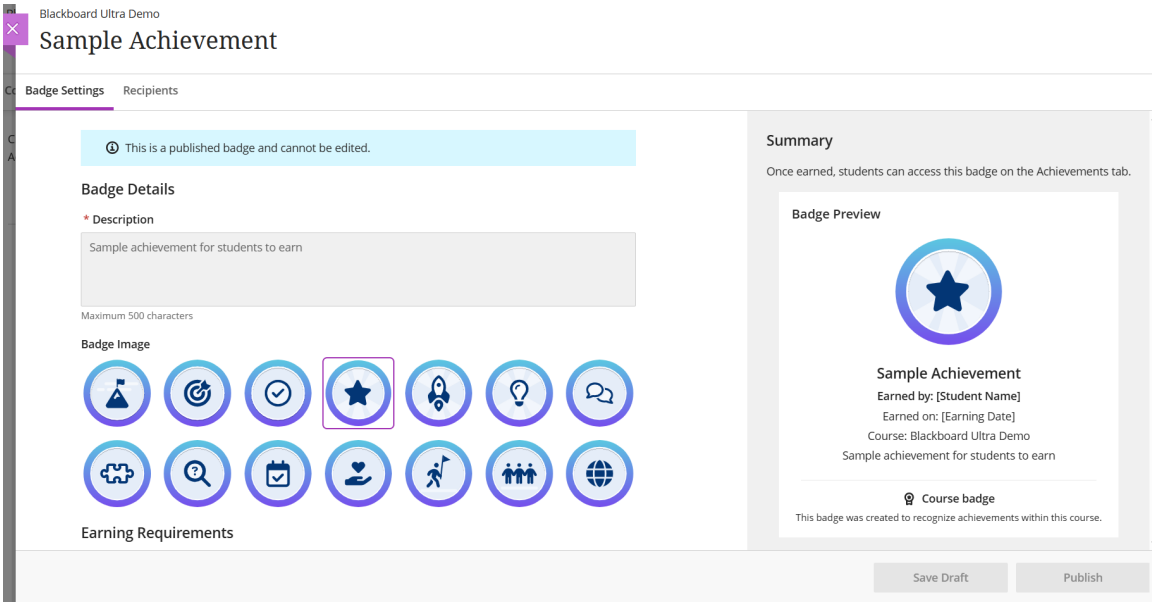
```
SELECT
  crs.course_number AS course_id,
  crs.name AS course_name,
  SPLIT_PART(crs.name, '-', 1) as semester_code,
  SPLIT_PART(crs.name, '-', 2) as subject_coursenumber,
  SPLIT_PART(crs.name, '-', 3) as section_number,
  REGEXP_REPLACE(subject_coursenumber, '\\d+$', '') AS subject,
  TRY_CAST(REGEXP_SUBSTR(subject_coursenumber, '\\d+$') AS INTEGER) AS crs_number,
  per.stage['user_id']::text AS instructor_id,
  ROUND(COALESCE(gact.time_spent, 0), 1) AS inst_minutes_grading,
  COALESCE(gact.interaction_cnt, 0) AS inst_grading_interactions,
  COALESCE(std.student_count, 0) AS crs_student_cnt,
  COALESCE(gbk.item_count, 0) AS crs_item_cnt,
  COALESCE(gds.grades_count, 0) AS crs_grades_cnt

FROM course crs
  LEFT JOIN person_course pc ON pc.course_id = crs.id   -- Left join in case there are no instructors
  LEFT JOIN person per ON per.id = pc.person_id

  -- Student counter subquery
  LEFT JOIN (
    SELECT
      course_id,
      COUNT(1) AS student_count
    FROM person_course
    WHERE row_deleted_time IS NULL   -- No deleted enrollments
      AND course_role = 'S'          -- Only student role
      AND enabled_ind                -- No disabled enrollments
    GROUP BY course_id
  ) std ON std.course_id = crs.id

  -- gradebook item counter subquery
  LEFT JOIN (
    SELECT
      course_id,
      COUNT(1) AS item_count
    FROM gradebook
    WHERE deleted_ind = FALSE
      AND row_deleted_time IS NULL
    GROUP BY course_id
  ) gbk ON gbk.course_id = crs.id

  -- Grades counter subquery
  LEFT JOIN (
    SELECT
      gradebook.course_id,
      COUNT(1) AS grades_count
    FROM grade
    LEFT JOIN gradebook ON gradebook.id = grade.gradebook_id
    WHERE grade.row_deleted_time IS NULL
      AND gradebook.row_deleted_time IS NULL
    GROUP BY gradebook.course_id
  ) gds ON gds.course_id = crs.id

  -- Grading activity by instructor subquery
  LEFT JOIN (
    SELECT
      person_course_id,
      SUM(duration_sum) / 60 AS time_spent,
      SUM(interaction_cnt) AS interaction_cnt
    FROM course_tool_activity
    WHERE tool_source_id = 'instructor_gradebook'
    GROUP BY person_course_id
  ) gact ON gact.person_course_id = pc.id

WHERE pc.course_role = 'I'              -- Only get instructors
  AND pc.row_deleted_time IS NULL       -- No deleted instructors
  AND crs.row_deleted_time IS NULL      -- No deleted courses
  AND semester_code = '202340'
  AND crs_number BETWEEN 1000 and 4999

ORDER BY crs.course_number ASC;
```

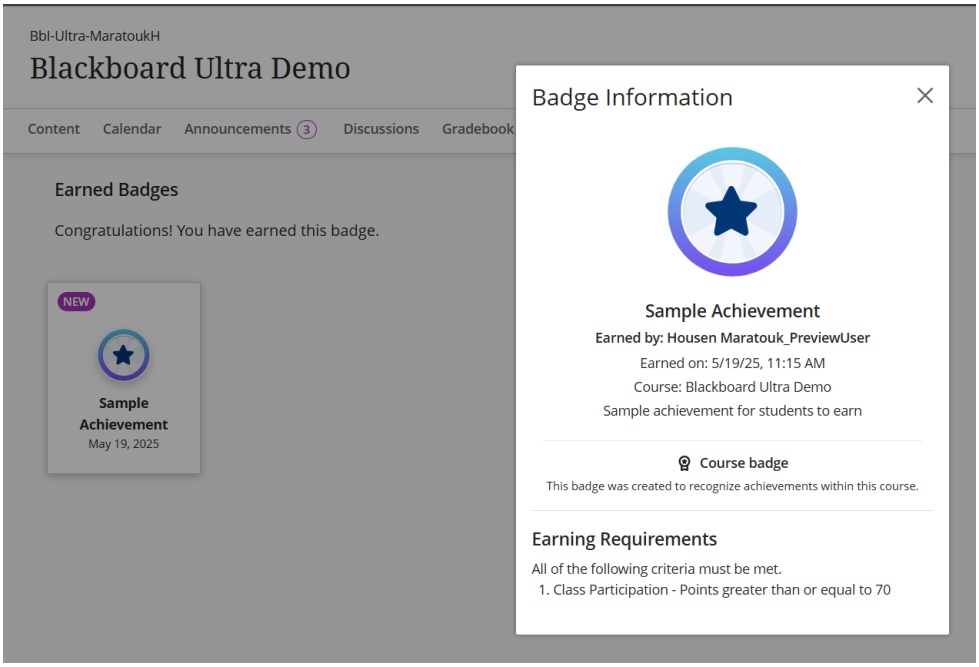
- **Blackboard Analytics**

  This year, CTT expanded the use of Blackboard analytics to better understand patterns of course adoption, instructional practices, and student engagement. Through systematic data collection and reporting, analytics provided actionable insights into how faculty and students are using Blackboard Ultra. These reports supported decision-making across academic and support departments, guided targeted professional development, and informed initiatives for enhancing teaching, learning and student success. (Blackboard Analytics)

- **Blackboard Achievements**

The achievements tool allows instructors and course designers to designate criteria for issuing rewards to students in the form of both badges and certificates. Students can see which rewards they've earned and what's required of them to receive additional rewards, providing insight into learning progression toward defined competencies. It allows faculty set performance criteria that students must meet to earn badges in the classes. In those crucial first few weeks of a semester, students are often trying to gauge how they're doing and what they can do to improve their standing in a class. Using a simple interface, faculty can create custom badges that students can earn based on their performance on assessments or by meeting attendance requirements, providing them with periodic milestones they can achieve on their paths toward successfully completing a course.





BLACKBOARD SUPPORT

REMOVING BARRIERS TO TEACHING

OBJECTIVES

- Identify and resolve technical issues by collaborating with Enterprise Information Systems (EIS) and Anthology/Blackboard tech support team.
- Review and update local documentation and tutorials to support effective use of Blackboard.
- Develop the DIY Guides and workshop materials on Blackboard as needed.
- Supervise the CTT team's responses to client requests submitted through the Web Help Desk.
- Provide consultations and webinars to help faculty enhance their use of Blackboard.
- Provide faculty and student training and support for Blackboard Ultra
- Review and update the Blackboard documentation site to ensure accuracy and relevance.
- Design and deliver new webinars and tutorials to train faculty and staff on Blackboard features.

ACHIEVEMENTS

During the AY 2025, CTT managed a total of 2,749* Web Helpdesk requests, distributed across staff members according to their areas of responsibility. The majority of requests (70%) were handled by Housen Maratouk, followed by Ming Jian with 15%, Jae Kim with 8%, Dominique Harris with 4%, and Sena Bulak with 3%. This distribution highlights the diverse expertise within the team and the collaborative effort required to meet faculty and student needs.

Faculty accounted for the overwhelming majority with 2,269 requests (82%), while students submitted 480 requests (18%). This pattern reflects CTT's primary role in supporting instructors in course design, technology integration, and effective use of Blackboard and other teaching tools, while also extending direct assistance to students as needed.

It is noticed that requests were nearly evenly split between WP Online courses (1,358; 49%) and regular campus-based courses (1,391; 51%), demonstrating CTT's balanced support for both online and face-to-face modalities.

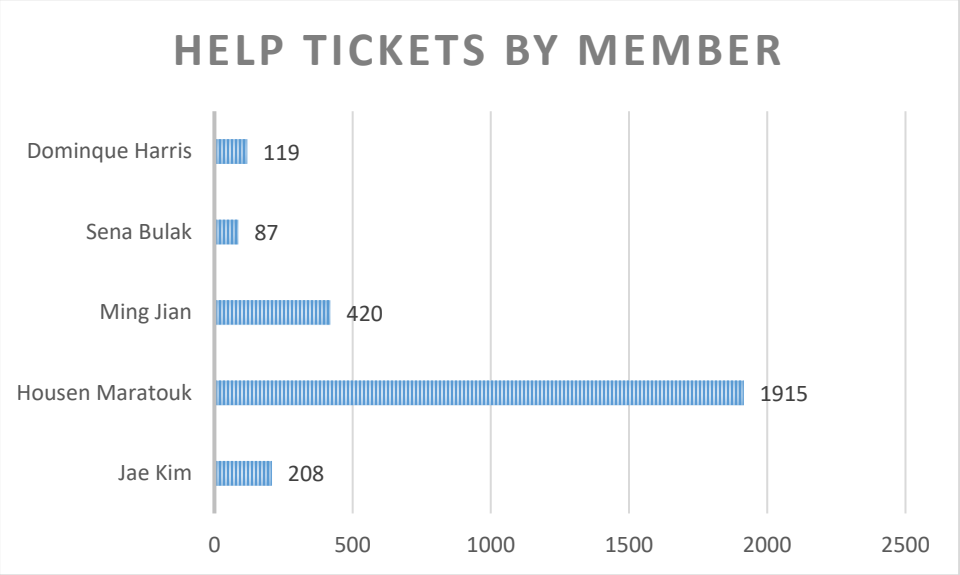
- AY2025 Blackboard Help Desk Report

* From Oct. 1, 2024 to Sep. 23, 2025

- **Blackboard Support via Web Helpdesk**

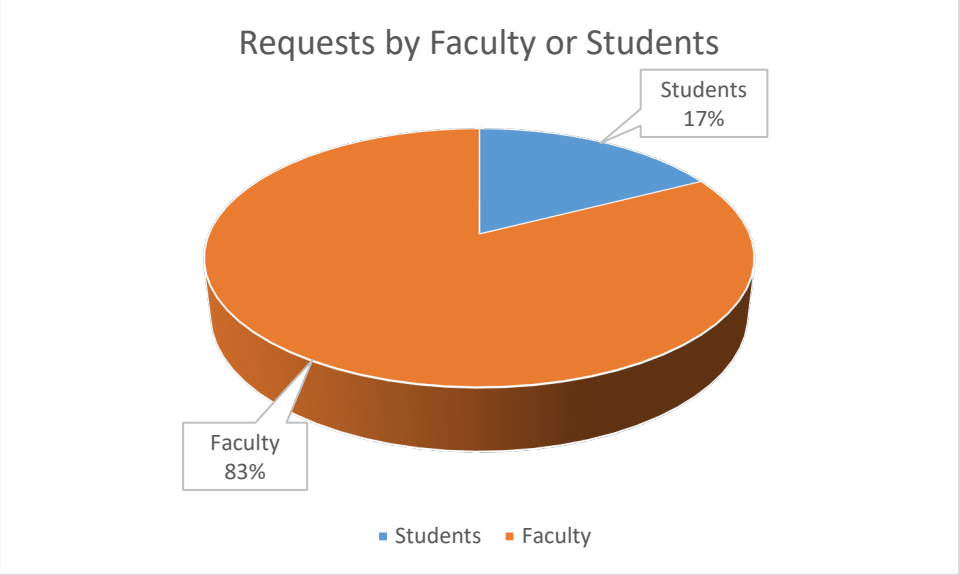
Stats. by CTT Members

Jae Kim	Housen Maratouk	Ming Jian	Sena Bulak	Dominique Harris	Total
208	1915	420	87	119	2749
(8%)	(70%)	(15%)	(3%)	(4%)	(100%)



Stats by Requests from Faculty vs. Students

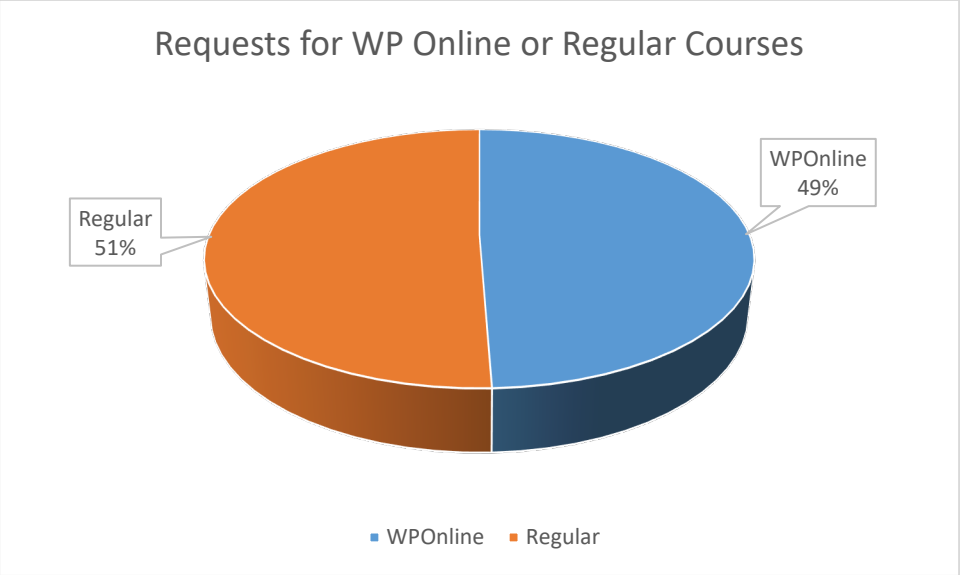
Faculty	Students	Total
2269	480	2749



- **Blackboard Support via Web Helpdesk (Continued)**

Stats. by Requests for WP Online or Regular Courses

WP Online	Regular	Total
1358	1391	2749



Stats by Request Topics

Assessment	73	3%
Assignments	233	8%
Course Banner Request	94	3%
Course Restoration	39	1%
Course Copy	396	14%
Discussion Board	41	2%
Grade Center	120	4%
Loggin in	55	2%
Course Merge	402	15%
Other	1093	40%
Peer Evaluation	156	6%
Respondus	47	2%
Total	2749	100%

- **Appraisals from Requesters (Help Desk Survey)**

  - *I still rate my WPUNJ IT Family as the BEST IT TEAM in the country. I have wore many hats and have worked with other IT team all over the country but I always mention how good our IT Team is during my speaking engagements. Kudos to all!*
  - *Ming was quite helpful and was able to address the request during our call. Sending a big thank you!*
  - *Thanks for being awesome!*
  - *Thanks to Housen for saving my courses!*
  - *Thank you, Housen, as always, for your assistance!*
  - *It's always a pleasure working with the IT staff. There is no problem that they can't figure out! Kudos to an awesome team!*
  - *Very responsive even over the weekend. Zeroed in on my gradebook and calculation issues and helped me fix them quickly. Jae is very knowledgeable and always patient. Very glad he is here to help.*
  - *Excellent service!*
  - *Great experience working with Housen. Thanks for the support.*
  - *Great IT staff and great experience. IT is amazing at WPU!! Thank you:)*
  - *Ming Jian provided assistance immediately which was extremely helpful to me. I appreciate his professionalism and expertise.*
  - *I always have an excellent experience with the IT Help Team. They're excellent!*
  - *Thanks to the staff especially Housen for his counsel. Housen is the best!!*
  - *Excellent service from IT!*
  - *Great as always!*
  - *Excellent support always! Thank you!*
  - *Jaehyun was very helpful, as always.*
  - *Incredibly fast considering this was the first day of the semester - thank you!*
  - *Our BB staff is terrific. They are always very helpful and respond very quickly.*
  - *Quick and efficient!*
  - *The problem was addressed quickly, and I am so thankful!*
  - *The IT department at WPU is always diligent and courteous when I needs assistance.*
  - *They are great.*
  - *Housen was great! He took of this quickly, and I now have the access that I need. Thank you!*
  - *You´re great! Thank you so much!*
  - *Best tech team ever! Always timely and help me fix my problems.*
  - *Excellent!*
  - *Thanks so much for your help. The IRT staff has always been helpful and reliable!*

- ## Faculty DIY documents

To support faculty in adopting Blackboard Ultra and to streamline the transition process, the IRT team developed a comprehensive suite of self-paced Do-It-Yourself (DIY) materials. These resources include step-by-step guides, video tutorials, and quick reference documents designed to help instructors independently navigate course setup, content migration, and key Ultra features. By providing accessible, on-demand training, the DIY materials empower faculty to build confidence with Ultra at their own pace, reduce reliance on one-on-one consultations, and ensure consistent use of best practices across courses.

The implementation of these materials has enhanced efficiency by addressing common support questions, improved faculty satisfaction by offering flexible learning options, and strengthened WPU's overall capacity to deliver high-quality online and hybrid learning experiences.

- Blackboard Achievements
- Copy Banners
- Availability
- Discussion and Email Communication
- Grade Reconciliation
- Mac Scroll-bar Issues
- Setting Up the Overall Grade
- Setting up Overall Grade-points
- Setting up Assessment
- Quickstart Perusall
- Managing Item Visibility to Students
- Full Course Copy
- Enabling Respondus Lockdown Browser
- Copy Content
- Blackboard Analytics
- Accommodations

- ## Communicating with Faculty on Updates on Blackboard

During the AY 2025, the Center for Teaching with Technology (CTT) has maintained consistent and transparent communication with faculty regarding updates and enhancements to Blackboard Ultra. To ensure faculty were informed in a timely and accessible manner, CTT employed a multi-channel communication strategy:

- **Monthly Blackboard Updates:** A dedicated update was prepared and published each month on the CTT webpage, highlighting new features, system upgrades, and tips for effective use. These updates served as a central reference point for faculty and were archived for easy access. (https://www.wpunj.edu/irt/ctt/bbupdates)
- **Blackboard Institution Page Announcements:** Key updates were also posted directly on the Blackboard Institution page, ensuring visibility to all faculty and students upon login. This approach provided broad, immediate outreach and increased awareness of important changes.
- **Timely Notifications of Critical Updates:** For system outages, urgent patches, or significant feature releases, CTT issued targeted announcements to ensure faculty were prepared and supported.
- **Highlighting Professional Development Opportunities:** Each monthly update included links to upcoming CTT webinars, workshops, and self-paced resources, encouraging faculty to further explore Blackboard's capabilities. (https://chengrooms.wpunj.edu/calendar?cid=20675&t=g&d=0000-00-00&cal=20675&inc=0)

Through these combined efforts, CTT strengthened communication channels, improved faculty readiness for system changes, and reinforced trust in Blackboard as a reliable platform for teaching and learning at WPU.

- ## Renewal of Blackboard Multi-year Contract

With the multi-year Blackboard Ultra contract renewal approaching, I researched alternative learning management systems like Canvas and Desire2Learn and obtained quotes for their adoption. By researching the number of contracts among major colleges and universities and reviewing the features WPUNJ might need to be utilized, I provided the practical data to consider when negotiating with Anthology. As a result, WPUNJ saved more than $240,000 for the new contract.

- A Comprehensive Comparison of LMS

  As the current contract with Blackboard approaches its conclusion in two years, WPU is taking an opportune to reassess the LMS. The looming contract expiration serves as a catalyst for contemplating whether to renew with Blackboard or explore alternative platforms that may better align with evolving educational needs. On January 2024, CTT began the process of reviewing the potential alternative LMS by reviewing online materials and documentations from other institutions and venders. The focus of this report is to explore the prospects and options associated with transitioning from the long-standing Blackboard LMS to alternatives such as Canvas or D2L (Brightspace), particularly as the current contract with Blackboard approaches its expiration in two years.

  In conclusion, the choice between Blackboard, Canvas, and D2L requires a careful consideration of the unique features, capabilities, price, and considerations each LMS brings to the table. Blackboard Ultra, with its modern interface, robust AI-driven features, and comprehensive suite of tools, continues to be a stalwart in the industry. Canvas, known for its user-friendly design and commitment to innovation, has rapidly gained popularity and widespread adoption. D2L's Brightspace, with its emphasis on flexibility, personalized learning, and advanced analytics, offers a compelling option for institutions seeking a comprehensive LMS solution. Based on the comparison, all the LMSs reviewed are equally qualified to be an alternative LMS to WPU community. It is suggested that having a demo of each LMS to faculty and students will provide more accurate information on the LMS for WPU.

- LMS Quotes

  CTT exemplifies strategic leadership and innovation through the transformative work renegotiating William Paterson University's contract with Blackboard Learning Management System (LMS). Demonstrating exceptional initiative, CTT conducted a comprehensive market analysis of LMS usage across higher education institutions and solicited competitive quotes from major vendors, including Canvas and Desire2Learn. This rigorous, data-informed approach empowered WPU to negotiate from a position of strength.

  As a direct result of the efforts, Anthology agreed to reduce the University's five-year renewal cost by $100,000 and to eliminate projected additional storage fees—equating to a further $140,000 in savings (based on $20,000 per terabyte for 3 terabytes over 5 years). In total, CTT's innovative negotiation strategy secured over $240,000 in financial savings for the University.

  Beyond cost savings, the negotiation also resulted in a doubling of our LMS storage capacity from 3 terabytes to 6 terabytes, supporting the growing needs of academic departments and enhancing service delivery to faculty and students. This forward-thinking agreement not only strengthens WPU's digital infrastructure but also reinforces the University's reputation for prudent, progressive, and student-centered technological leadership.

- WPU 5Y Blackboard Renewal

Account Information: 8,001-15,000 FTE
Peak 90 day logins: 13,588

Learn Storage Footprint: 3 TB
Current Learn Storage Entitlement: 4 TB
NEW Learn Storage Entitlement: 6 TB*
NEW Learn User Entitlement: 16k users*

				7/1/25-6/30/26	7/1/26-6/30/27	7/1/27-6/30/28	7/1/28-6/30/29	7/1/29-6/30/30
			Current Year	Year 1	Year 2	Year 3	Year 4	Year 5
Learn Renewal	ANTH ALLY FOR LEARN	ALY.SW.LEARN.S	$ 26,000.00	$ 26,780.00	$ 27,583.40	$ 28,410.90	$ 29,263.23	$ 30,141.13
	BLACKBOARD LEARN SAAS PLUS	LSS.SW.SAAS2.S	$ 141,930.00	$ 166,581.90	$ 171,579.36	$ 176,726.74	$ 182,028.54	$ 187,489.40
	TRAINING PROGRAM DEVELOPMENT	LSS.TR.LRNLTM.S	$ 3,420.00	Dropping	Dropping	Dropping	Dropping	Dropping
	ACADEMY SEAT SUBSCRIPTION	TLO.TR.ACADSEATS.	$ 3,420.00	Dropping	Dropping	Dropping	Dropping	Dropping
	DIRECT DATA ACCESS ENVIRONMENT	AS-HST-OPDB-SAAS	$ 11,880.00	Dropping	Dropping	Dropping	Dropping	Dropping
	BLACKBOARD ADDITIONAL SAAS STOR	AS-HST-STO1TB-SAA	$ 19,800.00	N/A	N/A	N/A	N/A	
		Discount						
		TOTAL	$ 206,450.00	$ 193,361.90	$ 199,162.76	$ 205,137.64	$ 211,291.77	$ 217,630.52

- **Meeting with Susan Astarita on FERPA issues**

Adding Faculty/Staff to Course Shells

Column1	No Approval Needed	Registrar Approval Needed	Provost Approval Needed	Additional Comments
Faculty Peers: An instructor of record asks that another instructor or staff member be added with Instructor-level privileges	x			
Requests from Non-Instructor(s): Someone in the department (chairperson, coordinator, et al.) makes the request on behalf of other instructors		x		

Adding Students to Course Shells

Column1	No Approval Needed	Registrar Approval Needed	Provost Approval Needed	Additional Comments
Adding as Students (in a Student role): An instructor of record asks that a student be added, with Student-level privileges, to a shell in which they are not enrolled and in which they will act as a student		x		
Adding as Students (in a non-student role): An instructor of record asks that a student be added, with Student-level privileges, to a shell in which they are not enrolled and in which they will act in some other non-student capacity (Supplemental Instructors, Assistant, Mentee, Preceptee, Student Teacher, et al.)	TA x Tutor x	Instructor x		
Student with Other Roles: An instructor of record asks that a student be added with a role other than Student (Instructor, TA, Tutor, et al.)		x		Guest x
Requests from Non-Instructor(s): Someone in the department (chairperson, coordinator, et al.) makes the request on behalf of other instructors		x		

Course Merges/Masters

Column 1	No Approval Needed	Registrar Approval Needed	Provost Approval Needed	Additional Comments
Different Instructors: Request involves sections where the teaching assignment differs between shells	x			
Overlapping Instructors: Request involved sections where one instructor is in all shells, but another instructor is in one or more others	x			
Different Non-Cross-Listed Courses: On rare occasions, an instructor requests a merge or master for courses that are not sections of the same course and are not officially cross-listed		x		
Requests From Non-Instructor(s): Someone in the department (chairperson, coordinator, et al.) makes the request on behalf of other instructors		x		

STAFF ACCOLADES

ACKNOWLEDGING OF MERIT

PROFESSIONAL CERTIFICATION

Ming Jian

Completed Educause' s Micro-credential Course: Teaching with Artificial Intelligence
(EduCause Badge.png)
Completed Auburn University Course: Teaching with AI

Jae Kim

Completed Auburn University Course: Teaching with AI

PRESENTATIONS

Ming Jian

Enhancing Teaching with AI: Practical Application at the What Works for Students conference
Overview of AI Tools at the "AI Pedagogy Sandbox Webinar" organized by the Writing Across Curriculum

Sena Bulak

IT Resources and Blackboard, 2025 Adjunct Orientations
IT Resources and Blackboard, 2025 New Faculty Orientation

Housen Maratouk

Accessibility in Course Development, 2025 Accessibility Workshop
Blackboard Orientation for WP Online Students
Frequently Asked Questions, 2025 TA Orientation

Jae Kim

Transferring ExamSoft Tests to Blackboard, 2025 Nursing Department Faculty Meeting
The 1st line of defense in Blackboard Support, 2025 TA Orientation

COMMUNITY SERVICES

Jae Kim

AI Policy Task Force (AI Policy)
Technology Across the Curriculum (TAC)

Housen Maratouk

WP Online Task Force

Ming Jian

Faculty Development Committee (CAPS)
What Works Conference Planning Committee

Sena Bulak

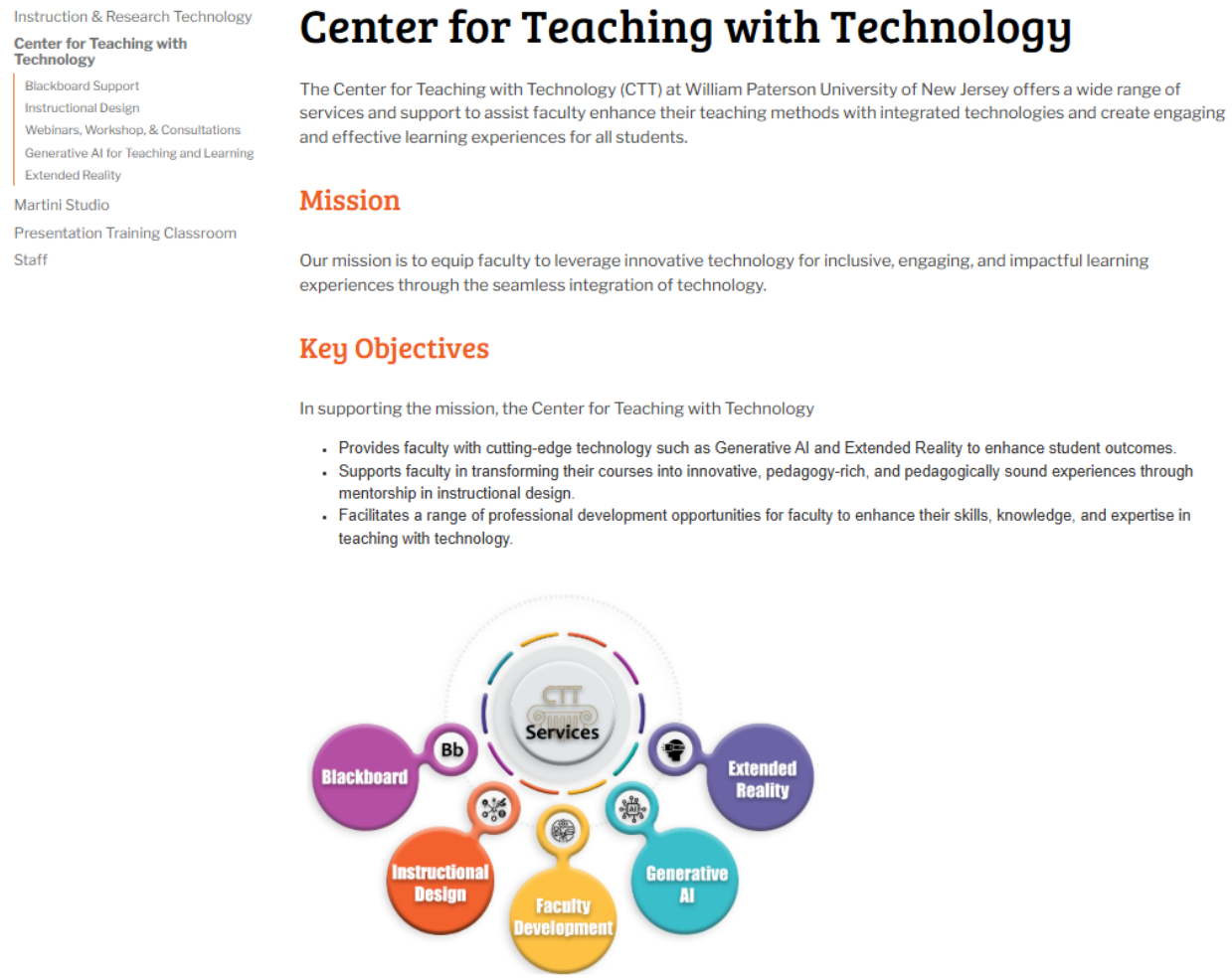
Technology Across the Curriculum (TAC)

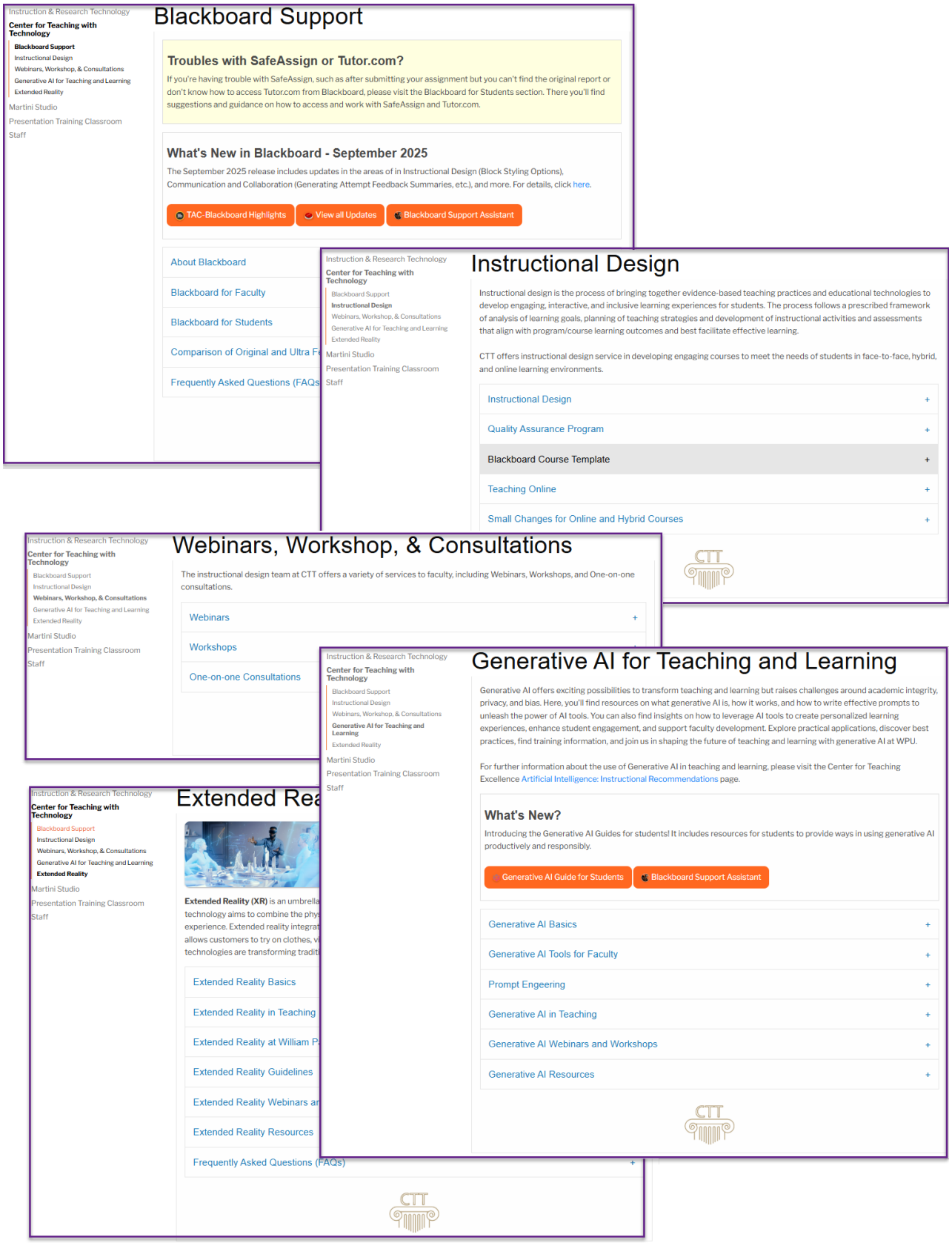
NEW CTT WEBSITE

INTERFACING WITH NEW SERVICES

RENOVATING THE CTT WEBSITE

This year, CTT launched a newly redesigned website to better serve the WPU community based on the WPU Future Initiative Report. The new site features an intuitive navigation structure and streamlined access to teaching and learning resources, including Blackboard Ultra support, instructional design services, Generative AI resources, and Extended Reality initiatives. It also integrates regularly updated news and announcements, keeping faculty informed about system updates and professional development opportunities. By improving usability, accessibility, and visibility of services, the redesigned CTT website strengthens our ability to support faculty and students while reflecting the University's commitment to innovation and teaching excellence.




Instruction & Research Technology
Center for Teaching with Technology
Blackboard Support
Instructional Design
Webinars, Workshop, & Consultations
Generative AI for Teaching and Learning
Extended Reality
Martini Studio
Presentation Training Classroom
Staff
Blackboard Support
Troubles with SafeAssign or Tutor.com?
If you're having trouble with SafeAssign, such as after submitting your assignment but you can't find the original report or don't know how to access Tutor.com from Blackboard, please visit the Blackboard for Students section. There you'll find suggestions and guidance on how to access and work with SafeAssign and Tutor.com.
What's New in Blackboard - September 2025
The September 2025 release includes updates in the areas of in Instructional Design (Block Styling Options), Communication and Collaboration (Generating Attempt Feedback Summaries, etc.), and more. For details, click here.
TAC-Blackboard Highlights
View all Updates
Blackboard Support Assistant
About Blackboard
Blackboard for Faculty
Blackboard for Students
Comparison of Original and Ultra F
Frequently Asked Questions (FAQs
Instructional Design
Instructional design is the process of bringing together evidence-based teaching practices and educational technologies to develop engaging, interactive, and inclusive learning experiences for students. The process follows a prescribed framework of analysis of learning goals, planning of teaching strategies and development of instructional activities and assessments that align with program/course learning outcomes and best facilitate effective learning.
CTT offers instructional design service in developing engaging courses to meet the needs of students in face-to-face, hybrid, and online learning environments.
Instructional Design
Quality Assurance Program
Blackboard Course Template
Teaching Online
Small Changes for Online and Hybrid Courses
Webinars, Workshop, & Consultations
The instructional design team at CTT offers a variety of services to faculty, including Webinars, Workshops, and One-on-one consultations.
Webinars
Workshops
One-on-one Consultations
Generative AI for Teaching and Learning
Generative AI offers exciting possibilities to transform teaching and learning but raises challenges around academic integrity, privacy, and bias. Here, you'll find resources on what generative AI is, how it works, and how to write effective prompts to unleash the power of AI tools. You can also find insights on how to leverage AI tools to create personalized learning experiences, enhance student engagement, and support faculty development. Explore practical applications, discover best practices, find training information, and join us in shaping the future of teaching and learning with generative AI at WPU.
For further information about the use of Generative AI in teaching and learning, please visit the Center for Teaching Excellence Artificial Intelligence: Instructional Recommendations page.
What's New?
Introducing the Generative AI Guides for students! It includes resources for students to provide ways in using generative AI productively and responsibly.
Generative AI Guide for Students
Blackboard Support Assistant
Generative AI Basics
Generative AI Tools for Faculty
Prompt Engeering
Generative AI in Teaching
Generative AI Webinars and Workshops
Generative AI Resources
Extended Rea
Extended Reality (XR) is an umbrella
technology aims to combine the phy
experience. Extended reality integrat
allows customers to try on clothes, v
technologies are transforming tradit
Extended Reality Basics
Extended Reality in Teaching
Extended Reality at William P
Extended Reality Guidelines
Extended Reality Webinars ar
Extended Reality Resources
Frequently Asked Questions (FAQs)

CONCLUSION

STAYING PROACTIVE, INNOVATIVE, AND RESPONSIVE

Focused on Five Objectives:

- *Generative AI in Teaching*
- *Extended Reality in Teaching*
- *Instructional Design*
- *Analytics for Student Success*
- *Blackboard Support*

CTT continues to strengthen WPU's teaching and learning ecosystem.

SUMMARY

In AY 2025, the Center for Teaching with Technology (CTT) played vital role in William Paterson University's teaching with technology mission by driving innovation, strengthening instructional support, and expanding the use of emerging technologies. The objectives for AY 2025 included the introduction of **Generative AI Literacy**, where new programs, workshops, and consultations empowered faculty to explore and apply AI responsibly in their courses. In addition, **Extended Reality (XR)** opened new opportunities for immersive, experiential learning, planning for WPU at the forefront of digital pedagogy.

At the same time, CTT promoted its foundation of service through comprehensive **Instructional Design** that guided faculty in course development and redesign, ensuring alignment with best practices and accessibility standards. The growing use of **Analytics for Student Success** provided valuable insights into learning patterns and course engagement, enabling evidence-based strategies to enhance student outcomes. Finally, extensive **Blackboard Support**—ranging from consultations and training to documentation, DIY guides, and system updates—ensured that faculty and students were able to effectively leverage the University's learning management system.

These achievements reflect CTT's commitment to innovation, collaboration, and excellence. By combining forward-looking initiatives with practical, day-to-day support, CTT continues to strengthen WPU's teaching and learning ecosystem and build the capacity for future growth in digital education.

MOVING FORWARD

"CTT will continue to build on this year's momentum by deepening faculty engagement with Generative AI, expanding professional development offerings that highlight responsible and creative uses of AI in teaching."

These projections reflect CTT's commitment to staying proactive, innovative, and responsive to the evolving needs of WPU community.

Looking ahead, CTT will continue to build on this year's momentum by deepening faculty engagement with Generative AI, expanding professional development offerings that highlight responsible and creative uses of AI in teaching. CTT plans to broaden the integration of **Extended Reality (XR)** by piloting more course-based projects and collaborating with faculty to design immersive learning experiences that connect theory with practice. In addition, **Instructional Design** will remain a cornerstone of our work, with a renewed emphasis on inclusive (universal) course design, accessibility, and alignment with national quality standards.

On the data front, CTT will continue to promote the use of **Learning Analytics** by developing dashboards and reports that provide faculty and administrators with actionable insights to improve student performance and retention. Finally, **Blackboard Support** will focus on streamlining training and communication, introducing new self-service resources, and preparing faculty for upcoming feature updates in Blackboard Ultra. These projections reflect CTT's commitment to staying proactive, innovative, and responsive to the evolving needs of WPU community.

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