



Exploring Student Success

A Design Thinking Workshop

CHICAGO

INTERNET2
2024
COMMUNITY
exchange

MARCH 4-7



Design thinking is a formula for transforming challenges into solutions through empathy and creativity.

The Exploring Student Success workshop at Internet2's Community Exchange conference was geared towards introducing participants to the human-centered design framework, all with a focus around a student's experiences and interactions with technology. The methodologies introduced emphasized empathy, prioritization, creative ideation, and iterative feedback as a path to develop solutions with the end user in mind. Although the session revolved around the student experience, the activities discussed are broadly applicable to everyone within the campus community, including administration and faculty.



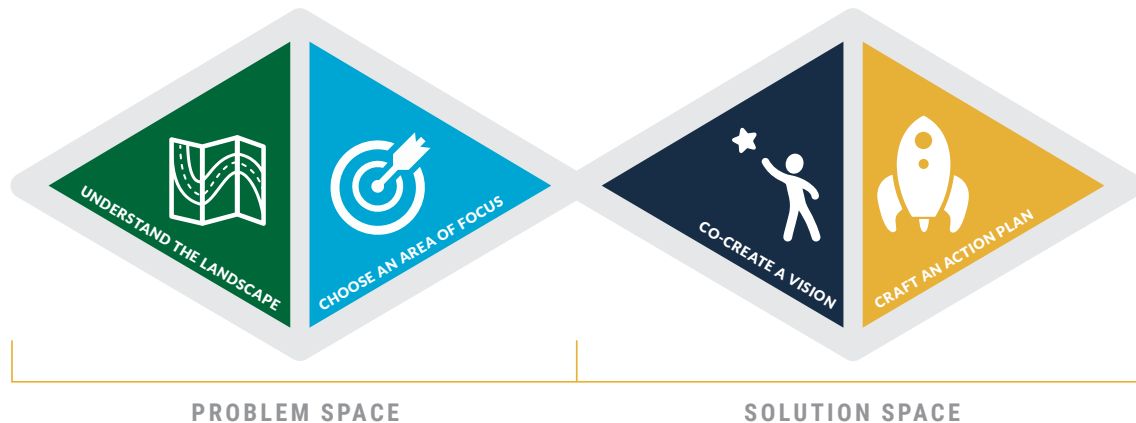
PARTICIPANT DEMOGRAPHICS

The following list includes the roles of who attended Community Exchange, reflecting the diverse perspectives and expertise present in the workshop:

- Chief Information Officers & their leadership teams
- C-Level Leadership (Chief Technology Officers, Chief Information Security Officers, Chief Procurement Officers)
- CEO & Executive Directors
- IT Directors & Managers
- State & Regional Network Operators
- Network Directors, Managers, Engineers, & Programmers
- Security Professionals
- Research Computing & Data Professionals
- Researchers
- Vice Presidents for Research
- Cloud Architects
- Identity Architects

METHODOLOGY

Utilizing the Double Diamond framework—Discover, Define, Develop, and Deliver—we structured the session to follow this path through a series of interactive activities.



The **Student Journey Map** was the first step in the Discover phase, where the audience explored challenges and opportunities based on student life cycles and the technology they might interact with at each stage of their academic journey. This helped the participants build empathy for their perspectives and needs.

The audience then transitioned to the Define phase and participated in **Priority Grouping**, deciding which of the challenges and opportunities from the map were most critical to focus on for their respective institutions.

Lastly, individuals came up with one tangible action item for a top priority of their choice, and gathered additional insights and ideas from peers at their table with an **Idea Chain** as part of the Develop phase. They were then encouraged to continue ideating after the session was over, which would put them in the Delivery stage of the Double Diamond.

The ultimate goal was to introduce the dynamic flow of the Double Diamond framework in addressing educational technology challenges. By highlighting the importance of empathetic engagement and strategic action, the session aimed to inspire a thoughtful approach to integrating new technologies in higher education, ensuring solutions are both impactful and user-centered.

ACTIVITIES

STUDENT JOURNEY MAP

A method for visualizing students' technology experiences throughout the stages of their academic career, pinpointing challenges and opportunities.

PRIORITY GROUPING

An exercise that focuses on immediate needs by setting priorities in time-based increments, amplifying what's most important based on thoughts captured by the Student Journey Map.

IDEA CHAIN

An activity that builds on highlighted challenges or opportunities from the Priority Grouping exercise by creating actionable ideas through input from peers.

MAJOR THEMES AND FINDINGS

BY STUDENT JOURNEY PHASE

This report distills key themes and insights from the Student Journey Map, highlighting the challenges and opportunities within each phase of the student journey.

Applications Phase

Challenges in this phase revolve around students facing difficulties with a fragmented application process, characterized by unclear requirements and limited support. Opportunities for improvement include the adoption of AI-driven tools, centralized application portals, and enhanced communication channels to simplify the application journey for students.

Acceptance Phase

The use of outdated technology and processes that fail to meet students' expectations poses significant challenges. The potential for innovation lies in leveraging data to improve student engagement and streamlining the transition from acceptance to enrollment with more intuitive, technology-forward solutions.

Undergrad Students Phase

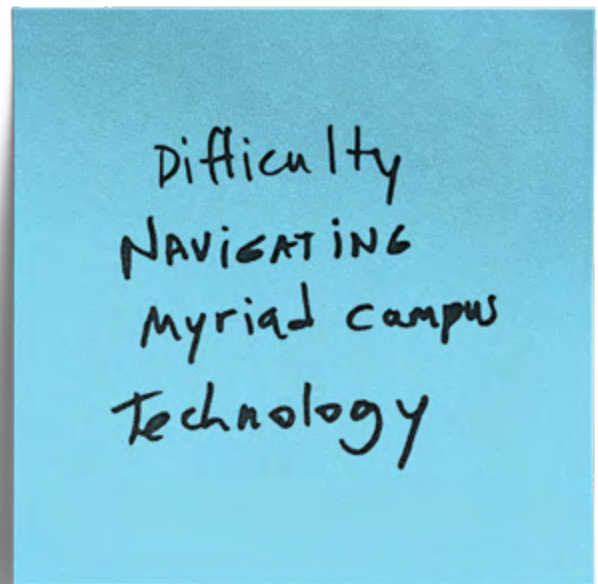
Barriers to success are identified as complex or unclear technological environments and access issues, resulting in a disintegrated system landscape. Creating a unified information dashboard and improving technology literacy among students are suggested solutions to enhance the undergraduate experience.

Degree Considerations Phase

The expectations placed on students' technological expertise and the fragmented nature of systems are major challenges. Opportunities exist in the automation of degree audits and the provision of more comprehensive career support services to alleviate these difficulties.

Post-Grad Phase

A clear disconnect between educational outcomes and workforce readiness, along with challenges in aligning job opportunities, mark the post-graduation experience. Solutions include focused initiatives on bridging this gap through experience acquisition and enhanced networking opportunities.



Alumni Phase

Challenges include engaging alumni beyond financial contributions and fostering opportunities for continuous learning and networking. Developing platforms for lifelong learning and reevaluating alumni benefits are proposed as ways to enhance alumni relations.

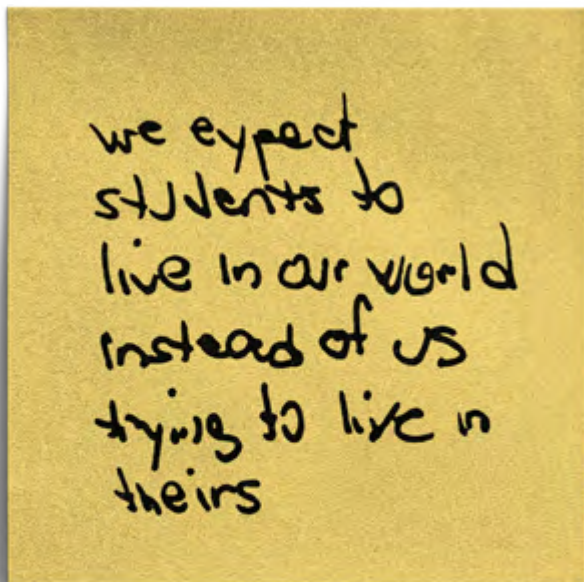
OVERARCHING THEMES

For a more cohesive analysis, we've organized the identified challenges and opportunities into four main themes: Communication, Technology Infrastructure, Support Services, and Career Transition.

Communication

Challenges: Difficulty in accessing information on financial aid, scholarships, and admissions; inadequate updates; poor communication of changes.

Opportunities: Streamlining communication through improved processes and digital tools, leveraging AI for guidance, and engaging students with modern technology.



Technology Infrastructure

Challenges: Technical problems with application systems; unclear technology requirements; fragmented digital landscape.

Opportunities: Developing cohesive systems for a unified information dashboard, personalized to meet diverse student needs.

Support Services

Challenges: Limited resources for inquiries; lack of undergraduate support; insufficient guidance for career pathways.

Opportunities: Enhancing support through streamlined processes, promoting institutional knowledge sharing, and scheduling services efficiently.

Career Transition

Challenges: Disconnect between educational outcomes and workforce needs; unclear career pathways; limited job opportunity information.

Opportunities: Automating degree audits, improving career services, and facilitating professional networking and job fairs.

Across the Student Journey Map, the themes showcased that there is room for growth in setting **clear expectations around processes and technology, simplifying the currently complex and fragmented systems.** Participants also identified a significant opportunity to redesign systems and processes to be more intuitive and aligned with student perspectives. **Ultimately, there is a strong urge to greatly enhance the support provided to students as they navigate these systems.**

ACTIONABLE IDEAS

FROM IDEA CHAIN EXERCISE

The Idea Chain exercise, drawing from priorities identified through Priority Mapping, sparked a series of actionable ideas aimed at addressing some of the most pressing challenges related to the student experience. The following examples represent a snapshot of the collaborative thinking that characterized our workshop activities.

CHALLENGE:

Dis-integrated Student Experience

Participants proposed creating a unified platform or “single pane” that consolidates student resources, including living, health/wellness, and customized resources, to streamline the student experience. The strategy involves organizing various institutional roles—such as advisors, admissions, and student services—to align overlapping functions and foster a team-based case management approach, ensuring seamless transitions and handoffs between different service areas. Success could be further amplified by identifying essential data to enhance this integrated experience, championing the idea that improving the student experience is a collective responsibility supported by data-driven decisions and continuous student feedback.

CHALLENGE:

Degree Requirement Confusion

Ideas focused on fostering a shared understanding of the importance of clear degree requirements and prioritizing technological solutions to address confusion. Collaborating with the Provost and the Office of Student Success, utilizing input from student focus groups, and conducting thorough reviews of existing requirements were identified as critical steps. Incorporating AI chatbots and clear, accessible web-based information on degree requirements can provide students with the immediate answers they seek, while also enhancing the efficiency and effectiveness of academic counseling.

CHALLENGE:

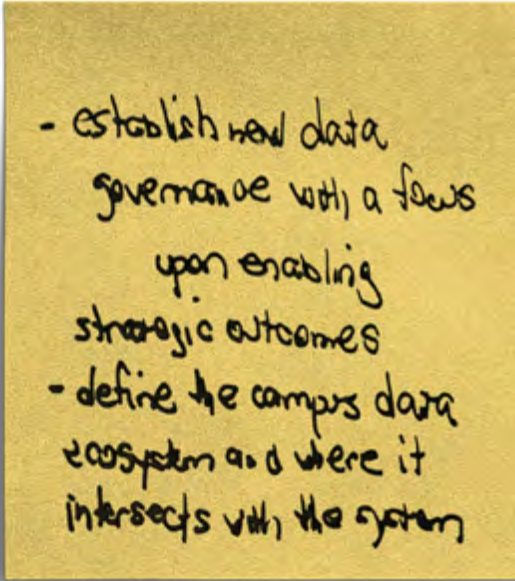
Data Quality

Enhancing data governance emerged as a priority, with a focus on establishing systems that enable strategic outcomes and accurately define the campus data ecosystem. Aligning technologies to improve data quality and consistency across the board, bolstered by campus-wide data literacy initiatives and executive sponsorship, can drive successful outcomes. Emphasizing the importance of accurate data entry and setting clear expectations for data management practices are essential steps toward achieving this goal.

CHALLENGE:

Website Search Functionality

Addressing this challenge involves developing or integrating modern tools that offer comprehensive search capabilities across an institution’s entire ecosystem of data and resources. Suggestions included creating a curated AI system with prioritized web pages and documents, catering to different user needs—academic, research, undergraduate, graduate—and exploring various user interfaces, including chat functions and simulated agents, to meet users “where they are.” The integration of these tools into mobile applications and learning management systems was also discussed as a means to enhance accessibility and usability.



- establish new data governance with a focus upon enabling strategic outcomes
- define the campus data ecosystem and where it intersects with the system

WHAT NEXT?

Human-centered design revolves around a deep understanding of the people you're aiming to help—be it students, faculty, and/or administration within your institution. Rounding out insights from the workshop, here are practical steps IT leaders can take to ensure technology rollouts are both effective and empathetic:

Empathize with your end users

Start by deeply understanding the needs, challenges, and experiences of all users impacted by the technology—students, faculty, administrators, etc. Conduct interviews, surveys, or focus groups to gather information. This is your foundation in developing solutions that genuinely address user pain points.

Conduct an assessment for the user's current state

Utilize activities like the Journey Map to gain a better view of the current technological landscape and user experiences. This should include identifying existing technologies, data availability, and any gaps or redundancies, and potential opportunities. The more detailed your understanding, the better equipped you'll be to embrace new technologies that align with organizational needs.

Identify your stakeholders

Early in your process, identify all stakeholders who will be impacted by or need to make decisions around the technology in question. This helps anticipate potential objections or concerns by hearing from important voices throughout the project lifecycle. Stakeholder mapping can prevent last-minute surprises that could derail your initiative.

Clarify and communicate your 'why'

Clearly articulate the rationale behind the new technology implementation. This message should match the expectations and needs of all stakeholders. Misalignment here can lead to resistance or lack of support for the project.

Gather iterative feedback and consider prototyping

Adopt an gradual approach to development, where feedback is sought continuously from end users and stakeholders. This can involve prototyping or pilot programs that allow for adjustments based on real-world use before full-scale implementation.

Foster a culture of open communication

Create channels for ongoing dialogue between IT teams, departments, and end users. This encourages feedback so that implementation remains a thoughtful and empathetic process.

Assess your data governance and data quality

Start to address data quality and governance upfront at your institution. High-quality, accessible data is essential for making informed decisions and supporting students et al. Establish clear protocols for data management and use this as an opportunity to clean and organize existing datasets.

Anticipate training and support

Plan for comprehensive training and support resources to help end users effectively utilize the new technology. This includes not just initial rollout support, but ongoing assistance to keep current changes in demand or chances for improvement.

Thank you for reviewing this report.



At West Arete, we're passionate about design thinking and its potential to help people do their best work across higher education. We enjoy open conversation about this framework and the comprehensive methodologies it offers.

If you're intrigued, inspired, or simply curious, we invite you to connect.

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