

# LMS's & Inclusion

**Developing a Framework for Campus Wide Inclusivity**

**Kevin Barhydt**  
**Senior Inclusive and Learning Technology Analyst**

# (formerly ITS Learning Technologies)

Category	Technology
Audience Participation	<a href="#">Plickers</a> , Clickers/TurningPoint
Audio / Sound Design / Podcast: Record/Edit	Audacity, <a href="#">Digital Studio: Isolation Booth</a>
Course Reserve Technologies	<a href="#">iPad Loaner Program</a> , Video Kits
Experiential Learning Assistance/Facilities/Equipment	<a href="#">MakerWeb</a>
Faculty Web Sites / Class Blogs	<a href="#">Muse</a> (WordPress)
Faculty Development LDDI Opportunities	Summer FDI, "Small Moments. Big Ideas. Building Connections" lunches
Geo Spatial Technology / Mashup	Google Map, MapAList, GIS, TEI, Google Earth
High Performance, Clustered Computing	<a href="#">Research Computing</a> via AWS and MGHPC
Learning Management System	<a href="#">Nexus</a> (Moodle)
Lecture Capture / Blended Learning	Panopto (formerly Ensemble), Camtasia, Jing, Doceri

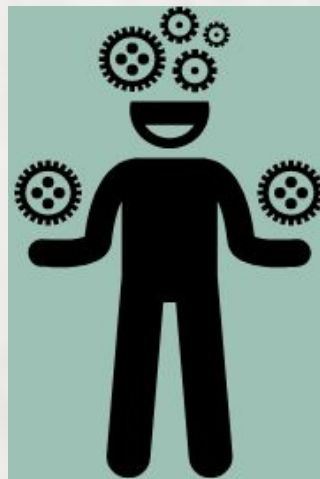
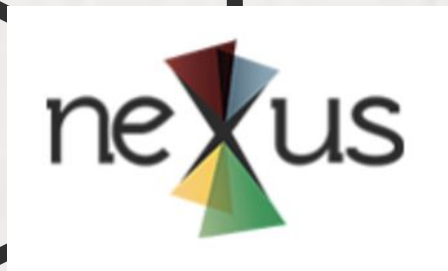
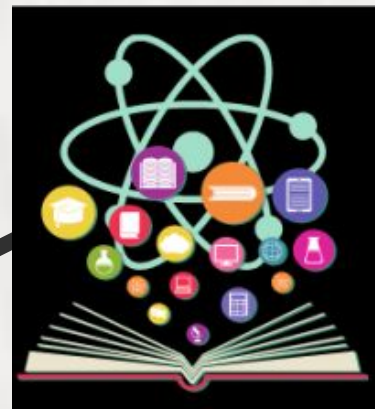
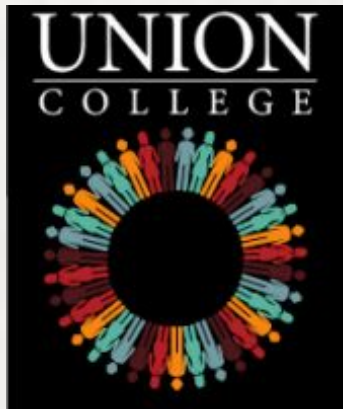
Mobile Learning	iPad, Tablet PC, iPhone, Android
Image Creation/Editing	Photoshop
Presentation	PowerPoint, Prezi, Google Presentation, Doceri
Create Voice Over Video or Screen capture	<a href="#">Digital Studio: Isolation Booth</a> & Wacom Tablet
Publish Streaming Video & Audio / Media	Panopto (formerly Ensemble), YouTube
Scanning / Optical Mark Recognition (OMR Grading)	FCRC: Flatbed Scanners, iPad Scanner Apps, FCRC: Remark Office OMR
On-Demand Technology Training for Faculty & Students	<a href="#">LinkedIn Learning Video Training</a> (formerly Lynda.com)
Video Production: Record/Edit	<a href="#">Adobe Premiere</a> , Quicktime Pro, iMovie, <a href="#">Digital Studio: Production Studio</a> / <a href="#">Isolation Booth</a>
Web 2.0 / Task & Collaboration Oriented Tools	<a href="#">Google Core Apps</a> / <a href="#">Google Apps Additional Services</a>
Web Conferencing / Telepresence / Virtual Office Hours / Remote Training / Live Webcast	Zoom, Skype, Cisco Telepresence, Ustream, <a href="#">Digital Studio ConnectIT Lab</a>

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# Universal Design for Learning..

“UDL is a framework intended to support the development of curricula which consider learner diversity and support inclusion. It is based on universal design for all users, regardless of disability, age, gender, size, culture and other factors.”  
(Connell et al. 1997; CEN 2003).

# Inclusive Technology..

“the use of digital technologies  
to support and scaffold learning  
to maximise the learning  
experiences of all learners”

(Pellerin, 2013).

# Learning Objectives

1. List two ways inclusive technology can be most powerfully articulated in your community and your individual work.
2. Explain how Design Thinking can be used to develop a framework to promote inclusivity and accessibility and develop buy-in and targeted outreach.
3. Name one or more strategies for developing communities of practice that connect stakeholders across the institution for proactively addressing inclusive technology.

**Where in your community  
is the vision for inclusive  
technology most  
powerfully articulated?**





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2018...



...2022



Reimagine the curriculum  
and renew pedagogy to  
anticipate and respond to  
contemporary and  
emerging academic  
needs and opportunities.

“Increase support for interdisciplinary, innovative and ***inclusive*** approaches to teaching, advising and mentorship, including emerging instructional technologies and evidence-based instructional design methods.”



The Power of Union

# Stages of Design Thinking

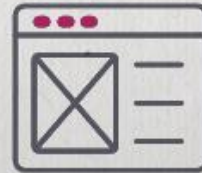
CLARIFY



IDEATE



DEVELOP



IMPLEMENT



Harvard Business School  
Dean Srikant Datar



## CLARIFY



- Make concrete observations about users.
- Reframe the problem to gain insight on deeper user needs.

## IDEATE



- Identify design principles that will guide ideation.
- Overcome cognitive fixedness to generate innovative ideas that fulfill the user needs identified in your research.

## DEVELOP



- Combine ideas into concepts by critiquing a range of possible solutions.
- Prototype quickly and purposefully to answer critical questions about a concept's viability.

## IMPLEMENT



- Apply principles of effective communication when describing your innovation's value to key stakeholders.
- Reflect on innovation management strategies.

## CLARIFY



- Make concrete observations about users.
- Reframe the problem to gain insight on deeper user needs.

- Identify and empathize with your audience
- What's in it for them?
- Take note of any that stand out
- Reframe findings into a problem statement or question
- Focus on the big picture
- Frame and reframe as you glean new insights

## CLARIFY



- Make concrete observations about users.
- Reframe the problem to gain insight on deeper user needs.

- Identify and empathize with your audience
- What's in it for them?
- Common pain points?
- Take note of any that stand out
- Reframe findings into a problem statement or question

## CLARIFY



- Make concrete observations about users.
- Reframe the problem to gain insight on deeper user needs.

- Faculty perceive Inclusion as an outside the classroom issue.
- Students perceive Inclusion as an individual rather than community based issue.
- How can the various pockets of Inclusive technology have greater campus wide impact?



## IDEATE



- Identify design principles that will guide ideation.
- Overcome cognitive fixedness to generate innovative ideas that fulfill the user needs identified in your research.

- Identify similar pain points
- Categorize them
- Evaluate resources
- Brainstorm ideas

## DEVELOP



- Combine ideas into concepts by critiquing a range of possible solutions.
- Prototype quickly and purposefully to answer critical questions about a concept's viability.

- Develop ideas
- Test, adjust, experiment, prototype

## IMPLEMENT



- Apply principles of effective communication when describing your innovation's value to key stakeholders.
- Reflect on innovation management strategies.

- Continue refining as you prepare
- Experimentation doesn't end
- Iterative process

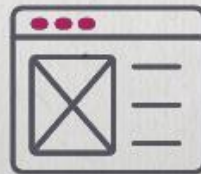
## CLARIFY



## IDEATE



## DEVELOP



## IMPLEMENT



- New Pedagogical Strategies
- New Technologies
- EIT Accessibility Working Group



- New Pedagogical Strategies



<https://www.union.edu/lddi>

- Inclusive Syllabus
- Inclusive Teaching Strategies

<https://muse.union.edu/faculty-deib/inclusive-teaching-strategies/>

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- Teaching with Technology Grants

<https://www.union.edu/academic-affairs/policies-forms/internal-education-foundation-guidelines-grants-faculty>

- Course Incubator Workshop

<https://www.union.edu/lddi/2022-summer-faculty-development-institute>

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- DEIB Faculty Resources

<https://muse.union.edu/faculty-deib>

- Faculty Development Institute

- FDI Book Club

<https://www.union.edu/lddi/2022-summer-faculty-development-institute>

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- Learning Technology Student Consultants

<https://www.union.edu/lddi/learning-technology-student-consultants>

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# Affinity Groups

- Campus Diversity & Inclusion
- LGBTQ+
- Liaison Committee for Campus Diversity
- Women of Color Collective
- BIPOC Employee Alliance
- UNITAS

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- New Technologies



- Inclusivity (Everywhere): *stealth mode*
- Blackboard Ally
- Moodle 4

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- Audience Participation: Plickers
- Blended Learning: Panopto
- Collaboration Tools: Google Core Apps
- Virtual: Zoom, Cisco Telepresence
- Podcast: Digital Studio ConnectIT Lab

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# LDDI Trainings

- Creating Inclusive Course Content
- Mini-Conference on Inclusive Pedagogy
- Silver Linings
- Stories of Innovation at Union College

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- EIT Accessibility Working Group



<https://www.union.edu/digital-accessibility>



# EIT Successes

- Digital Accessibility Website
- Inclusivity and Accessibility Training
- Digital Accessibility Checklist
- Buy-in from the VP and President

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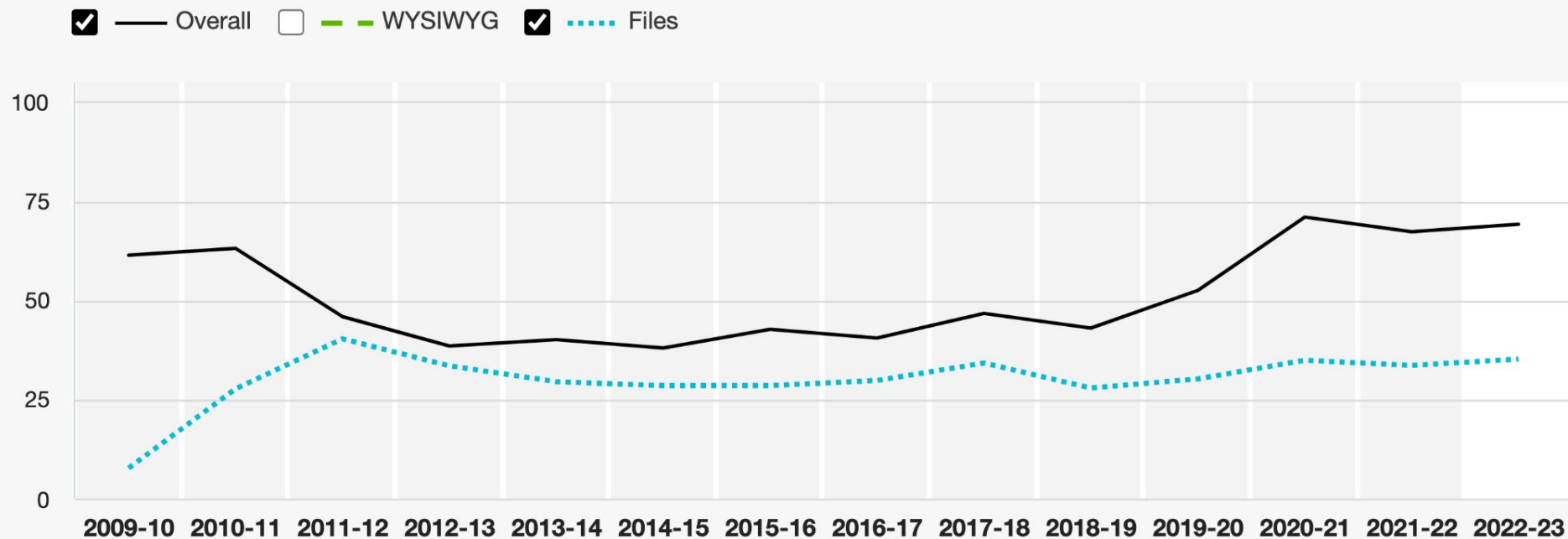




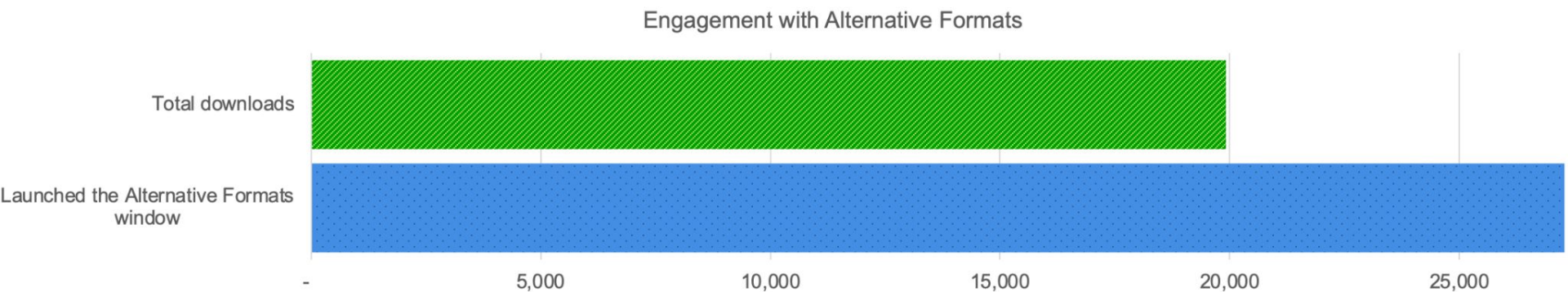
# Inclusive Technology Successes

Accessibility score

By academic year ▼

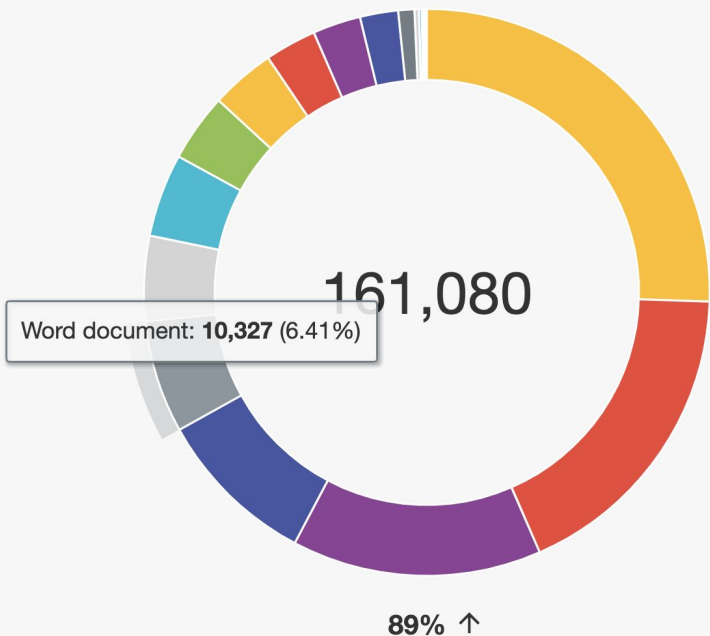


# Inclusive Technology Successes

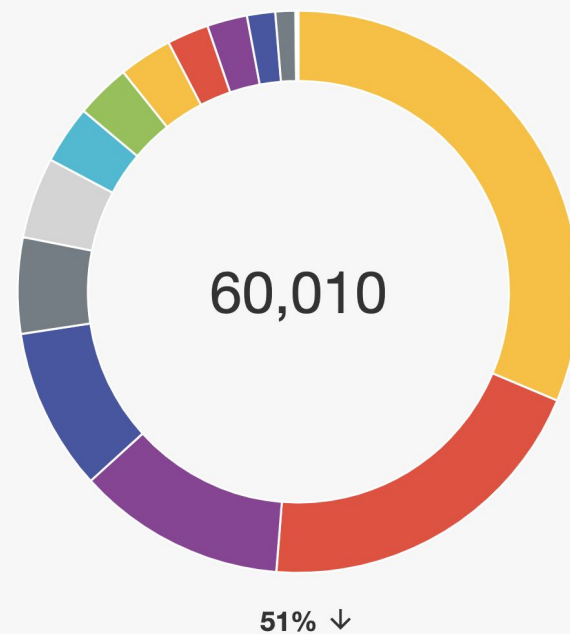


# Inclusive Technology Successes

## Total Content Created 2020-21

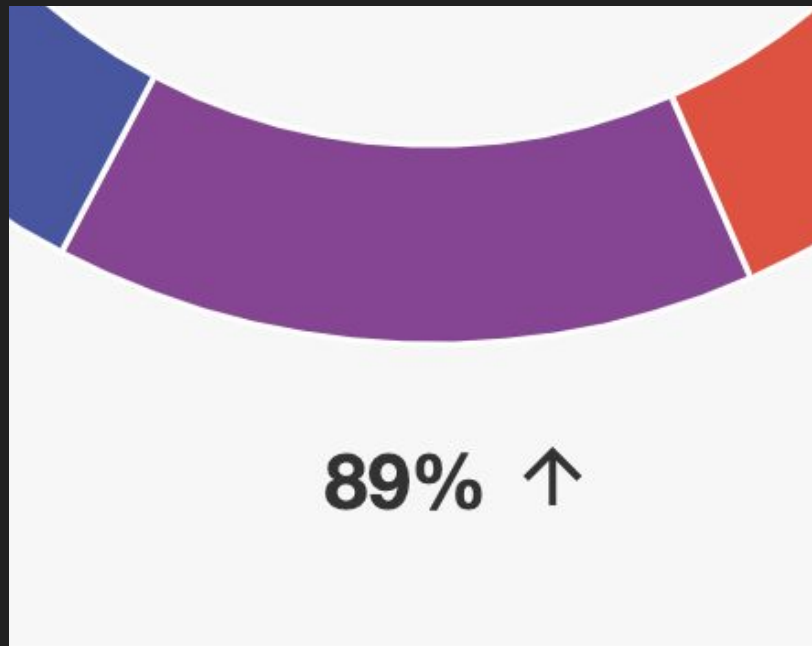


## Total Content Created 2021-23

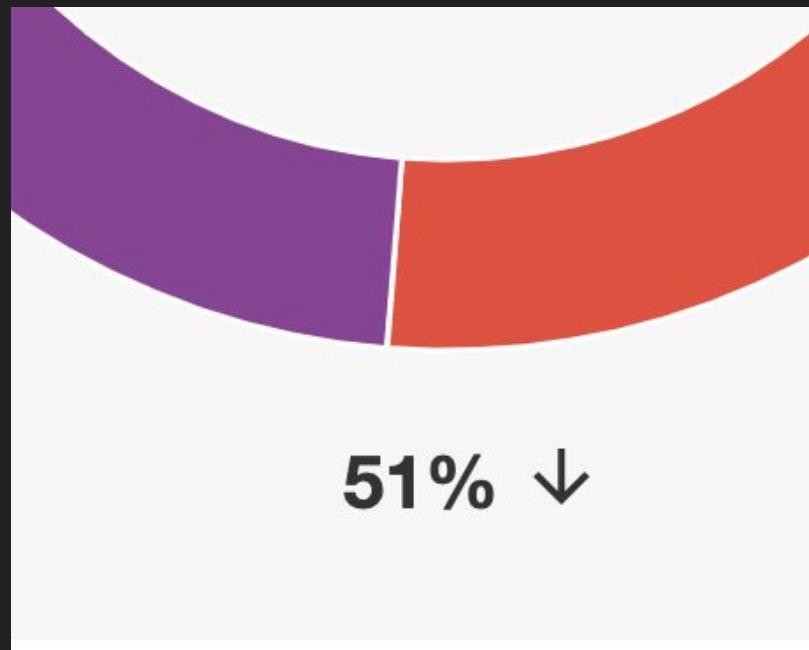


# Inclusive Technology Successes

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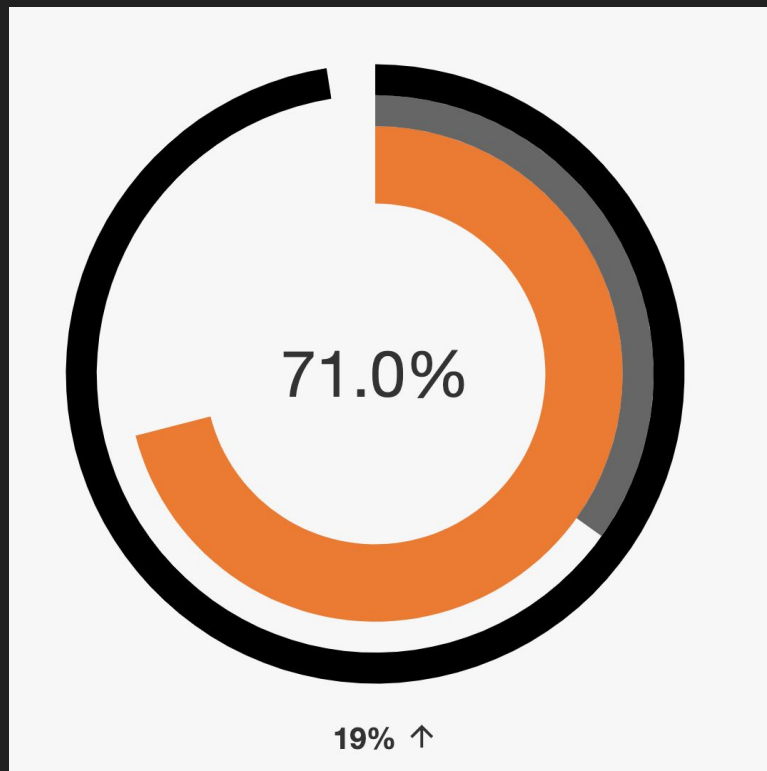


**Total Content Created 2021-23**

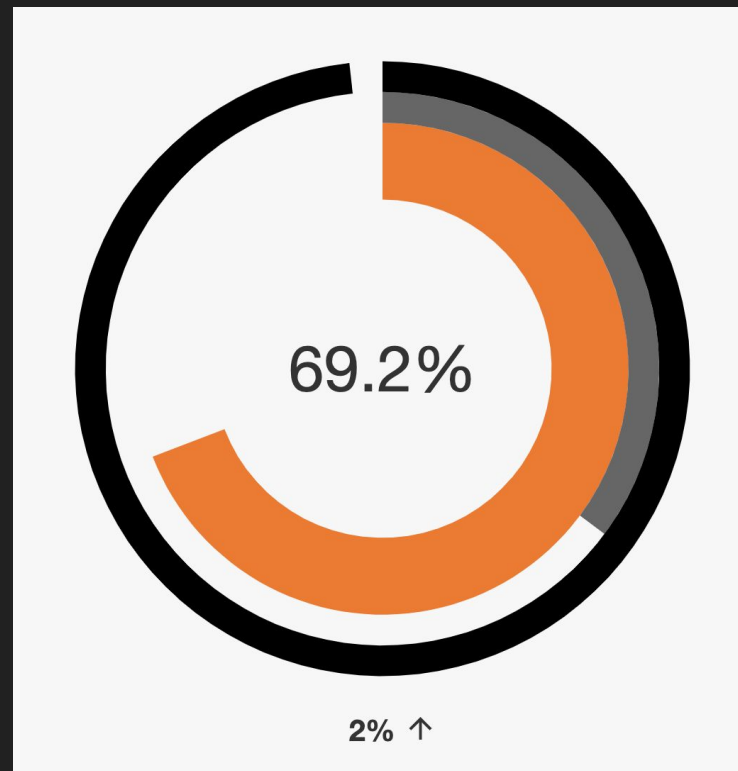


# Inclusive Technology Successes

**Total Content Created 2020-21**



**Total Content Created 2021-23**





## “Growing the Game: Expanding Hockey’s Horizons”

Tuesday, February 21  
7:00 p.m.



General Sports | 2/19/2023 2:52:00 PM | Steve Sheridan, Athletic Communications Director

## Union To Host Discussion on Diversity and Inclusion in Hockey





General Sports | 2/19/2023 2:52:00 PM | Steve Sheridan, Athletic Communications Director

# Union To Host Discussion on Diversity and Inclusion in Hockey



- Use Your Vendors
- Leverage Experts
- Newsletter
- Gorilla Market
- Students
- Lean Into Tech





## Stages of Design Thinking



- Change Perceptions of Inclusion
- Campus Wide Impact

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- Change Perceptions of Inclusion
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CLARIFY



IDEATE



Perceptions

&

Impact

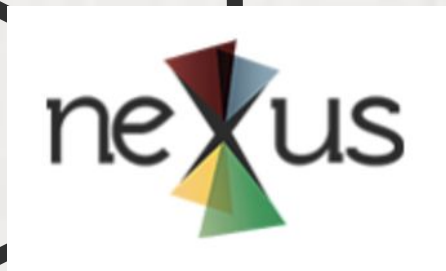
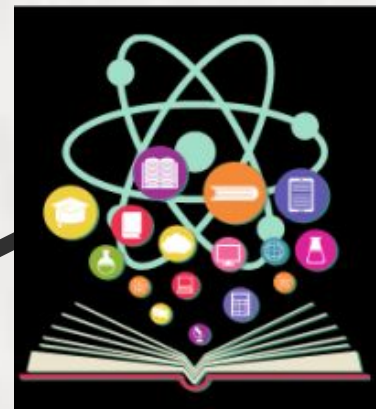
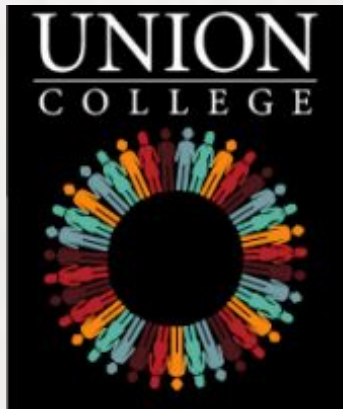
DEVELOP



IMPLEMENT



**Where in your  
individual work can the  
vision for inclusive  
technology be most  
powerfully articulated?**





Thank you



*Thank you*

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