


10-30-2018

Innovation in Pedagogy and Technology Symposium: University of Nebraska, May 8, 2018

University of Nebraska

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Innovation in Pedagogy and Technology Symposium

*University of Nebraska
May 8, 2018*

Select Conference Proceedings



Innovation in Pedagogy and Technology Symposium

University of Nebraska

May 8, 2018

Selected Conference Proceedings

Presented by University of Nebraska Online and
University of Nebraska Information Technology Services

*Zea Books
Lincoln, Nebraska
2018*



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Symposium website:

<https://symposium.nebraska.edu/agenda>

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Innovation in Technology and Pedagogy Symposium

University of Nebraska Information Technology Services (NU ITS) and University of Nebraska Online (NU Online) present an education and technology symposium each spring. The Innovation in Pedagogy and Technology Symposium provides University of Nebraska (NU) faculty and staff the opportunity to learn from nationally recognized experts, share their experiences and learn from the initiatives of colleagues from across the system. This event is offered free to NU administrators, faculty and staff free of charge.

Tuesday, May 8, 2018
The Cornhusker Marriott, Lincoln, NE

The Importance of the Event:

Technology has forever changed the landscape of higher education and continues to do so—often at a rapid pace. At the University of Nebraska, we strive to embrace technology to enhance both teaching and learning, to provide key support systems and meet institutional goals.

The Innovation in Pedagogy and Technology Symposium is designed for any NU administrator, faculty or staff member who is involved in the use of technology in education at all levels. Past events have drawn over 500 NU faculty, staff and IT professionals from across the four campuses for a day of discovery and networking.

The 2018 event was held in downtown Lincoln. The schedule included:

- Presentations by University of Nebraska faculty, staff and administrators
- Concurrent sessions focused on pedagogy/instructional design, support and administrative strategies and emerging technologies
- Panel discussions
- Roundtable discussions and networking time
- Sponsor exhibits
- Continental breakfast and lunch

Proposal Submissions:

Play an active part in this premier event, by sharing your best projects and initiatives that support your discipline, department, college or university mission.

Presentation proposals are accepted for the following tracks through January:

Leadership and Strategy in Online Learning

Vision and effective management plays a key role in the development and growth of online education. Creating a culture of collaboration and ingenuity while maintaining structured growth of a program can at times be challenging. The Leadership and Strategy in Online Education Track will allow the opportunity for administrators, managers and others vested in the success of online education to share ideas and identify new avenues of collaboration which will drive the future growth of online education at the University of Nebraska.

Pedagogy/Instructional Design

Well-designed and executed course pages, rubrics, lessons and assignments are vital to the success of online courses. Online courses rely on the expertise and collaboration of faculty and instructional designers. These efforts produce learning environments where students can thrive. The Pedagogy/Instructional Design Track allows the opportunity for individuals to share best-practices, identify ways to collaborate across departments and campuses and discuss the opportunities and challenges in creating the next generation of online learning environments at the University of Nebraska.

Emerging Technology

Technology is an active partner in teaching and learning. New technologies facilitate new methods and streamline processes. Applying IT to instruction can help address long-standing issues, create greater engagement and produces a level playing field for all students. Share your experience, case studies and technical demos through the Emerging Technology track.

Submit proposals here:

<https://symposium.nebraska.edu/proposals>

Keynote Presentation

Attendees are able to learn from nationally recognized speakers in the field of online learning in higher education.

The highlighted keynote speaker, Barbara Oakley, Ph.D., from Oakland University, drew on her background in the military and engineering to speak on learning from a psychological and biological viewpoint. Oakley provided learning techniques to help memory recall and practical solutions to beat procrastination. In addition, Oakley hosted two breakout sessions on encouraging women working in the STEM fields.

Keynote Presentation

Learning How to Learn: Powerful Mental Tools to Help You Master Tough Subjects


Barbara Oakley, Ph.D.

Oakland University

Barbara Oakley didn't begin learning remedial high school algebra until age 26. Now she's a professor of engineering, a New York Times best-selling author, and instructor of the world's largest massive open online course, with nearly two million registered students. How did this happen? She learned how to learn, and she now teaches others these practical insights. In this fun-filled keynote, you'll hear true stories of remarkable transformation and discover intriguing insights from science about how you can change and grow, no matter your age or stage of life.

Using metaphor and analogy, which primes neural circuits for difficult topics, Oakley explains how to learn effectively, drawing on her extensive experience as both an engineering professor and a linguist, as well as from key research insights from cognitive psychology and neuroscience. Learn about which techniques help and those that do not, how to use the brain's different learning modes to their best effect, and about methods like recall, "chunking" and the Pomodoro technique's approach to beating procrastination. You'll walk away with practical learning tools based on solid research—and you'll have fun along the way!

Learning How to Learn: Powerful Mental Tools to Help You Master Tough Subjects

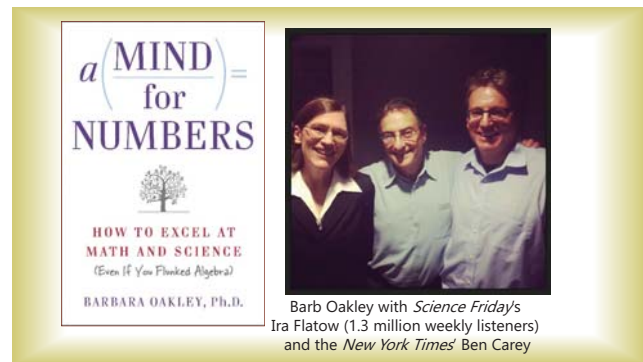
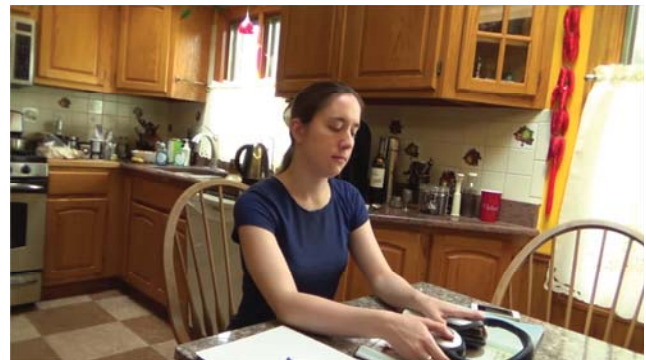
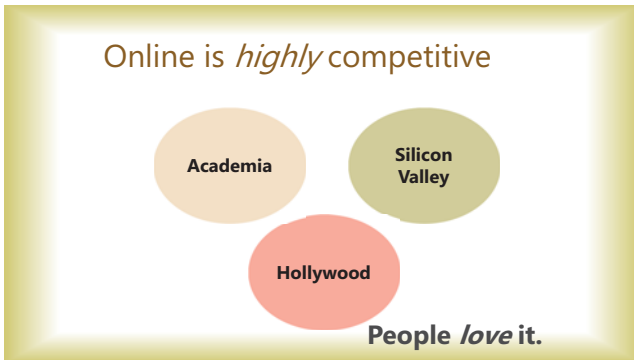

Barbara Oakley, PhD, PE
Professor of Engineering, Oakland University, Rochester, Michigan
Ramón y Cajal Distinguished Scholar of Global Digital Learning,
McMaster University



Barb Oakley,
Professor of Engineering
Oakland University
Rochester, Michigan



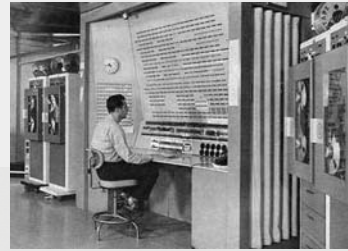
Terrence Sejnowski
Francis Crick Professor
The Salk Institute
Professor of Biological Sciences
University of California, San Diego



MOOCs & Online

- Reach
- "Legs"
- Your own educational television show
- Endless reruns
- Only investment—startup time

Most universities have not yet decoded MOOCs



"Caged" versus "Free Range" learners



18 to 24-year-olds

18 to 85-year-olds



The biggest challenge?



How did you do it?

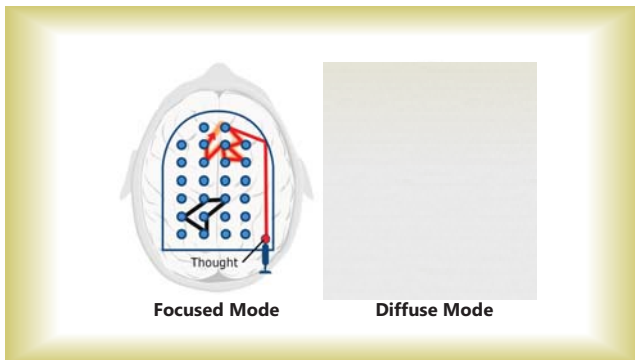
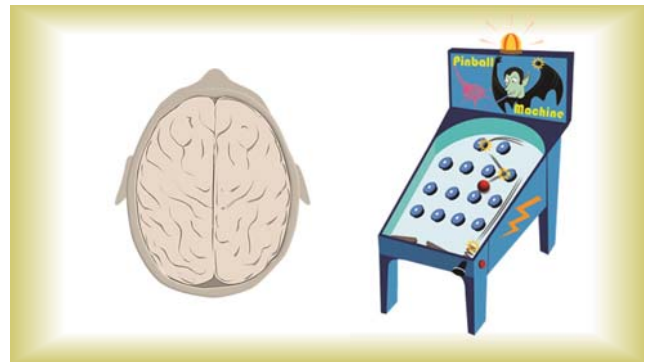


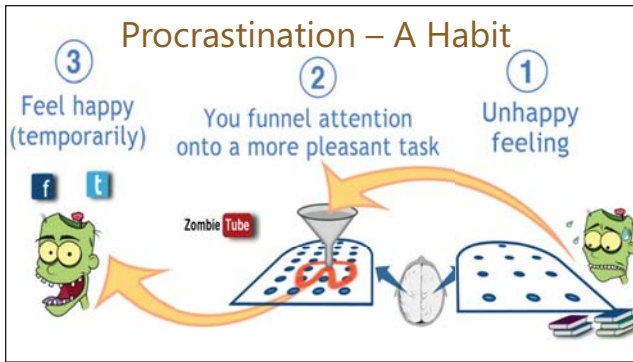
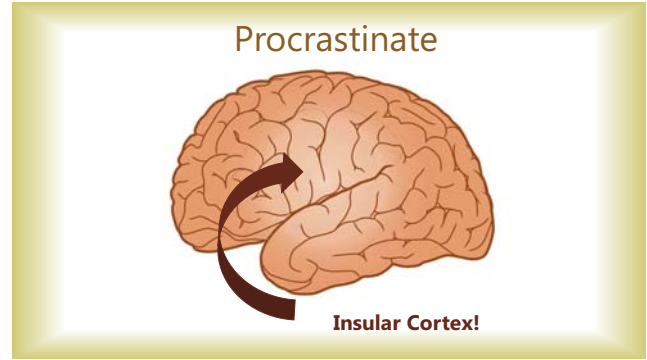
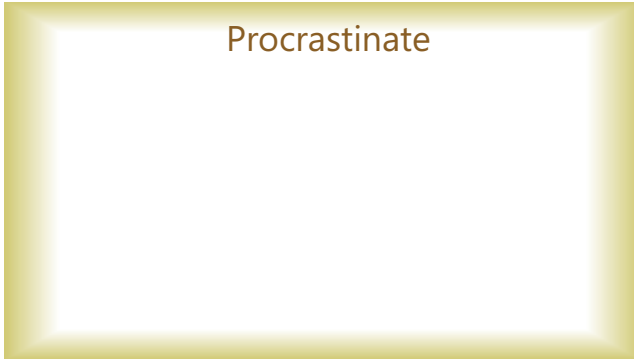
Function $f(x)$	Derivative $f'(x)$	Integral $\int f(x)dx$ (constant term is omitted)	Multiplication derivative $f'(x)$ (constant factor is omitted)	Multiplication integral $\int f(x)^n$ (constant factor is omitted)	Discrete derivative $\Delta f(x)$	Discrete integral (anti-difference) $\Delta^{-1} f(x)$ (constant term is omitted)	Discrete multiplication derivative $\Delta f(x)$	Discrete multiplication integral $\Delta^{-1} f(x)$ (constant factor is omitted)
a	0	ax	1	x^a	0	ax	1	x^a
x	1	$\frac{x^2}{2}$	x^a	$\frac{x^{a+1}}{a+1}$	1	$\frac{x^2}{2} - \frac{x}{2}$	$1 + \frac{1}{x}$	$\Gamma(x)$
$ax + b$	a	$ax^2 + 2bx$	$\exp\left(\frac{a}{ax+b}\right)$	$\frac{(b+ax)^{1+a}}{a}$	a	$\frac{ax^2 + 2bx - ax}{2}$	$1 + \frac{a}{ax+b}$	$\frac{a^x \Gamma\left(\frac{a+1}{a}\right)}{\Gamma\left(\frac{a+1}{a}\right)}$
$\frac{1}{x}$	$-\frac{1}{x^2}$	$\ln x $	$\frac{1}{\sqrt{a}}$	$\frac{1}{a}$	$-\frac{1}{x+x^2}$	$\psi(x)$	$\frac{x}{x+1}$	$\frac{1}{\Gamma(x)}$
a^x	$a^x \ln a$	$\frac{a^x}{\ln a}$	e^x	e^{-ax}	$(x+1)^n - x^n$	$\frac{B_{n+1}(x)}{n+1} + \zeta(-n) \frac{1}{x^{n+1}}$	$\left(1 + \frac{1}{x}\right)^n$	$\Gamma(x)^n$
a^n	$a^n \ln a$	$\frac{a^n}{\ln a}$	a	$a^{\frac{1}{n}}$	$(n-1)a^n$	$\frac{a^n}{n-1}$	a	$a^{\frac{1}{n}}$
$\sqrt[n]{a}$	$\frac{\sqrt[n]{a} \ln a}{n}$	$\frac{\sqrt[n]{a}}{n} \ln\left(\frac{\ln a}{x}\right)$	$\ln a$	a^{bx}	$a^{1/x} - a^{1/(x+1)}$	$?$	$a^{-1/x}$	$a^{1/x}$
$\ln a$	$\frac{1}{x \ln a}$	$\frac{1}{x \ln a} \ln\left(\frac{\ln a}{x}\right)$	$\exp\left(\frac{1}{x \ln a}\right)$	$\frac{(\ln a)^x}{x \ln a}$	$\ln a \left(\frac{1}{x} - \frac{1}{x+1}\right)$	$\ln a \Gamma(x)$	$\ln a (x+1)$	$?$
a^x	$a^x (1 + \ln a)$	ax	$e^{-1^{(1)-2 \ln a}}$	$(x+1)^{a-1} - x^{a-1}$	$?$	$?$	$\frac{(x+1)^{a-1}}{x}$	$K(x)$
$\Gamma(x)$	$\Gamma(x)\psi(x)$	$?$	a^{x-1}	$(x-1)\Gamma(x)$	$(-1)^{x-1} \Gamma(x)\Gamma(-x)$	x	$\frac{\Gamma(x)^{x-1}}{K(x)}$	$\frac{\Gamma(x)^{x-1}}{K(x)}$



Focused mode

Diffuse mode

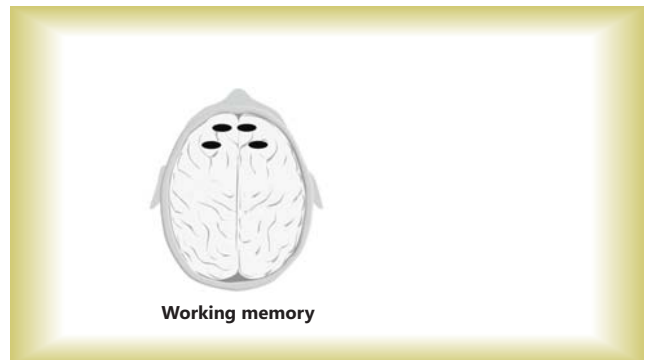
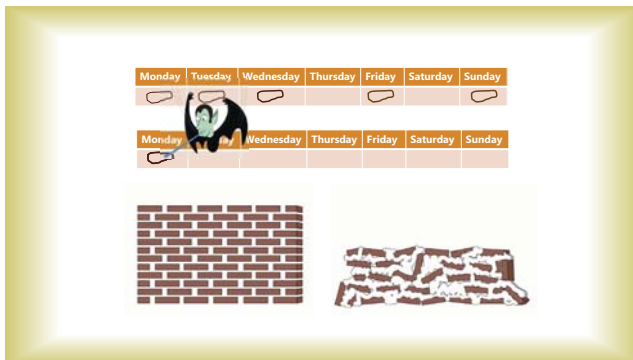
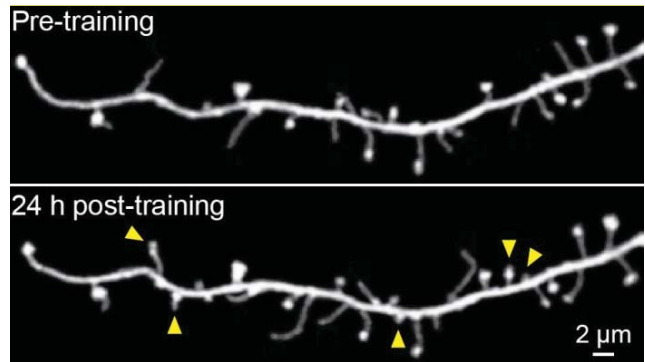
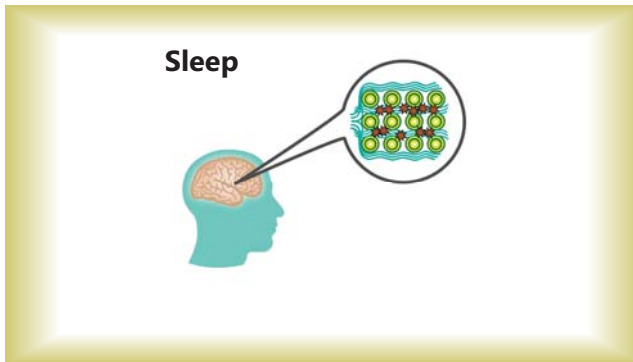


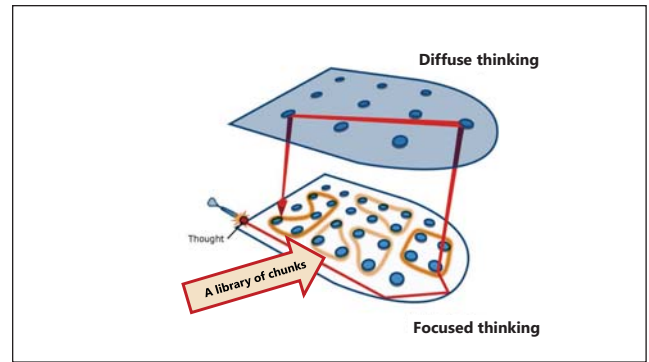
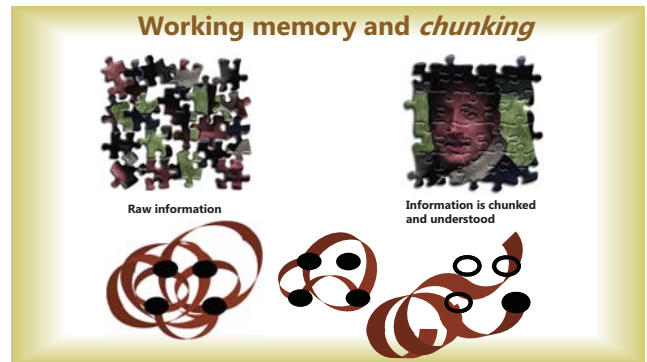
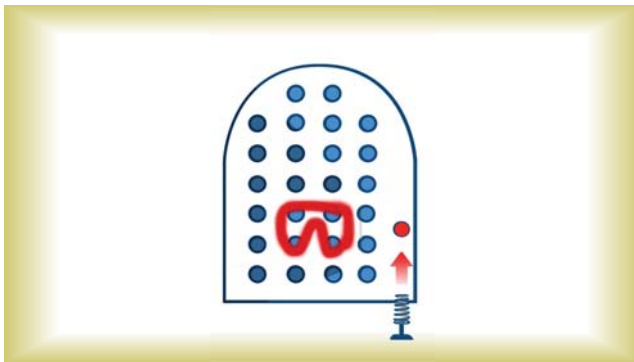
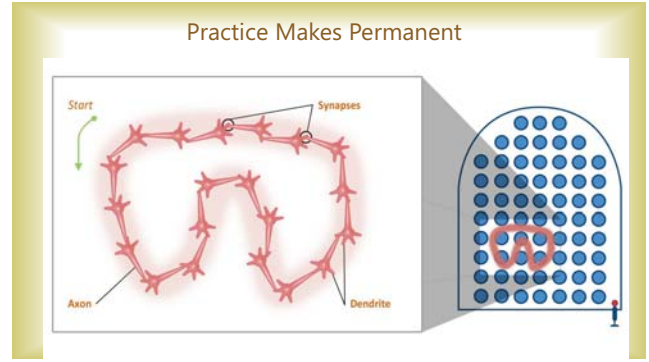
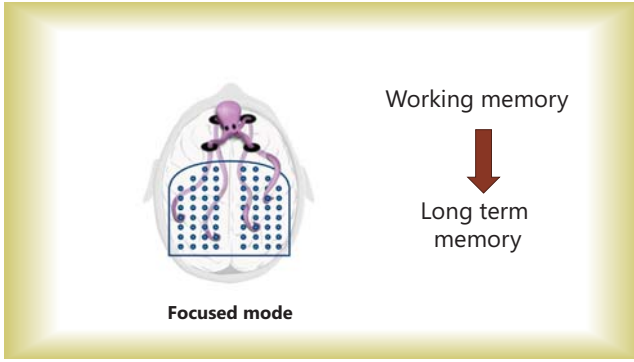


the Pomodoro TECHNIQUE

- Turn off all distractions
- Set timer for 25 minutes
- Focus
- Reward!

• Do NOT focus on finishing a task





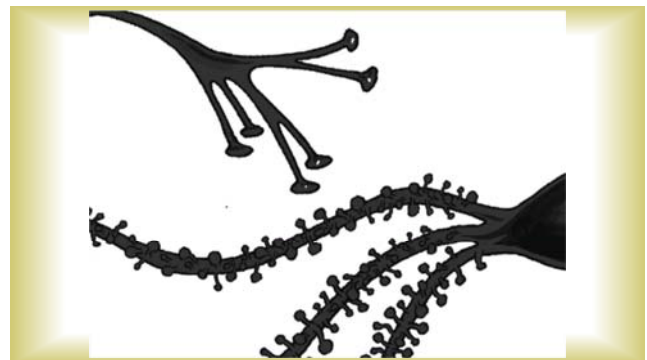
From the bestselling author of *A Mind for Numbers* and the creator of the popular online course *Learning How to Learn*

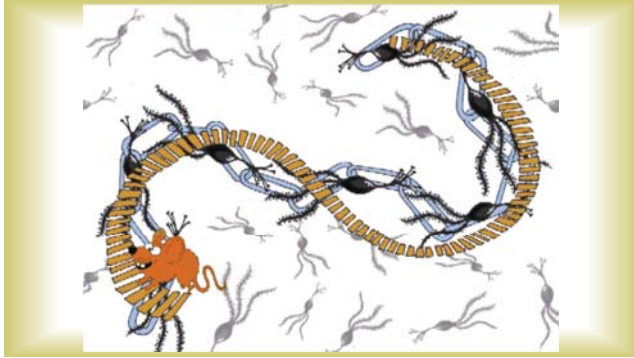
LEARNING HOW TO LEARN

A GUIDE FOR KIDS AND TEENS

BARBARA OAKLEY Ph.D. and
TERRENCE SEJNOWSKI Ph.D.
WITH ALASTAIR MUNNVILLE

Next project?
16 five-minute videos





The down side

The fan letters

We are at the ground
floor of a learning
revolution!

What are you waiting for?

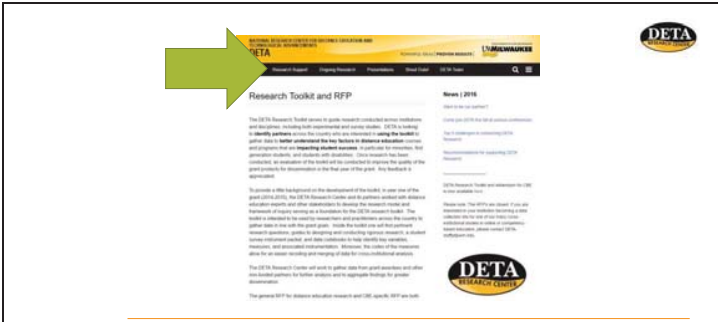
Fostering Quality by Identifying & Evaluating Effective Practices through Rigorous Research

Tanya Joosten

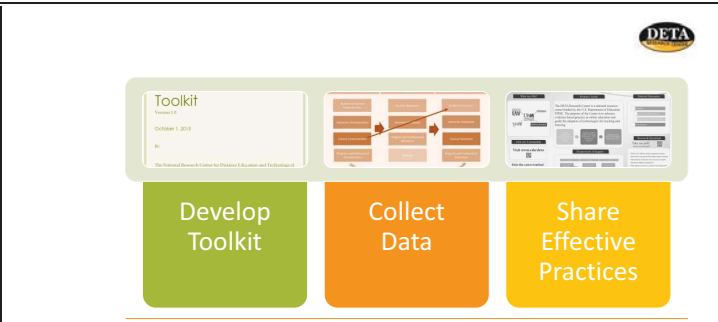
University of Wisconsin-Milwaukee

In redesigning digital education courses, special attention is paid to sound instructional approaches and ensuring practices foster success for all students. In this session attendees will learn how to better provide support to faculty and staff in informing their instructional practices based on previous research and conducting rigorous research on their new innovations.

<p>Fostering quality by identifying and evaluating effective practices through rigorous research</p> <p>Tanya Joosten, Ph.D., @tjoosten</p> <p>National Research Center for Distance Education and Technological Advancement (DETA Research Center)</p> <p>University of Wisconsin - Milwaukee</p>  <p><small>uw-m.edu/DETA DETA-staff@uw-m.edu Twitter.com/UWMDETA Facebook.com/UWMDETA #DETAResearch</small></p>	<p>slideshare.net/tjoosten</p>  <p><small>uw-m.edu/DETA DETA-staff@uw-m.edu Twitter.com/UWMDETA Facebook.com/UWMDETA #DETAResearch</small></p>
<p>Background</p> <p>DETA Research Center efforts</p> 	 <p>DETA Activities</p> 



Go to: <http://uwm.edu/deta/toolkits/>



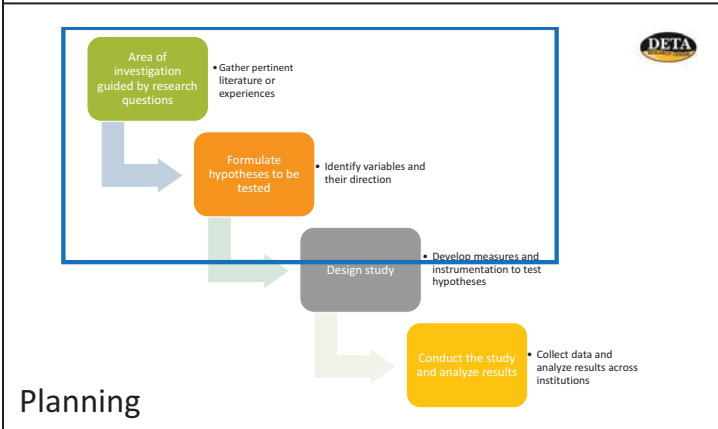
DETA activities



Institutional partners



How do we improve our instructional practice?

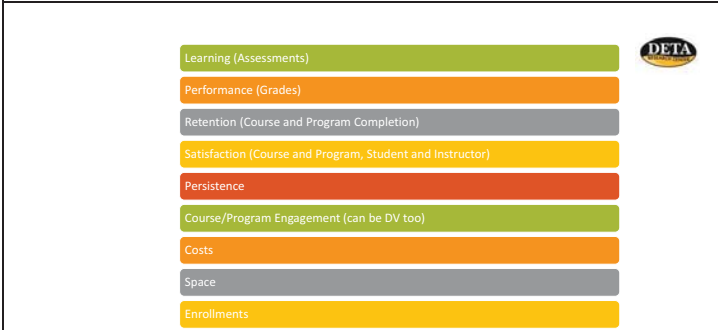


Planning

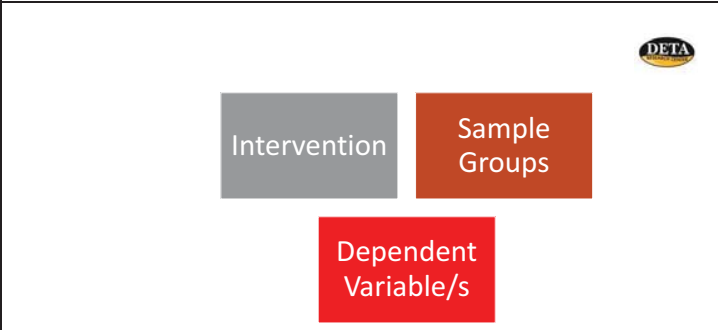


Desired outcomes


<http://uwm.edu/deta/desired-outcomes/>



Measurable Outcomes




Formulating a research question




Content	Interactivity	Assessment
<ul style="list-style-type: none"> • OER • Annotated eTexts • Transcription of audio and video • Video lectures • Voice over PPT lectures • Text lectures 	<ul style="list-style-type: none"> • Class asynchronous discussions • Small group project teams (team-based learning) • Small group asynchronous discussions • Informal discussions • Instructor-student communication 	<ul style="list-style-type: none"> • Feedback • Experiential • Problem-based • Written • Media

Identify the intervention




Quality of course design	Learner support	Course organization
Active learning pedagogy	Technological	

Other interventions




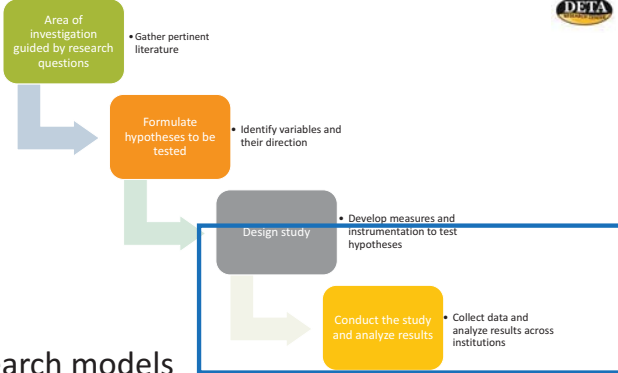
Multiple	Directionality
Variables and Measures	IV - DV

Developing hypotheses



Student success (grade in a course, course completion, and students' perceptions of learning, performance, and satisfaction) will be increased by students' perceptions of the **instructional characteristics**, typically referred to as course quality in instructional design and delivery, of a distance education course (student perceptions of learner support, design and organization, content, interactivity, and assessment and evaluation).



Hypothesis tested


Research models



Results of Cross-Institutional Online Learning Research

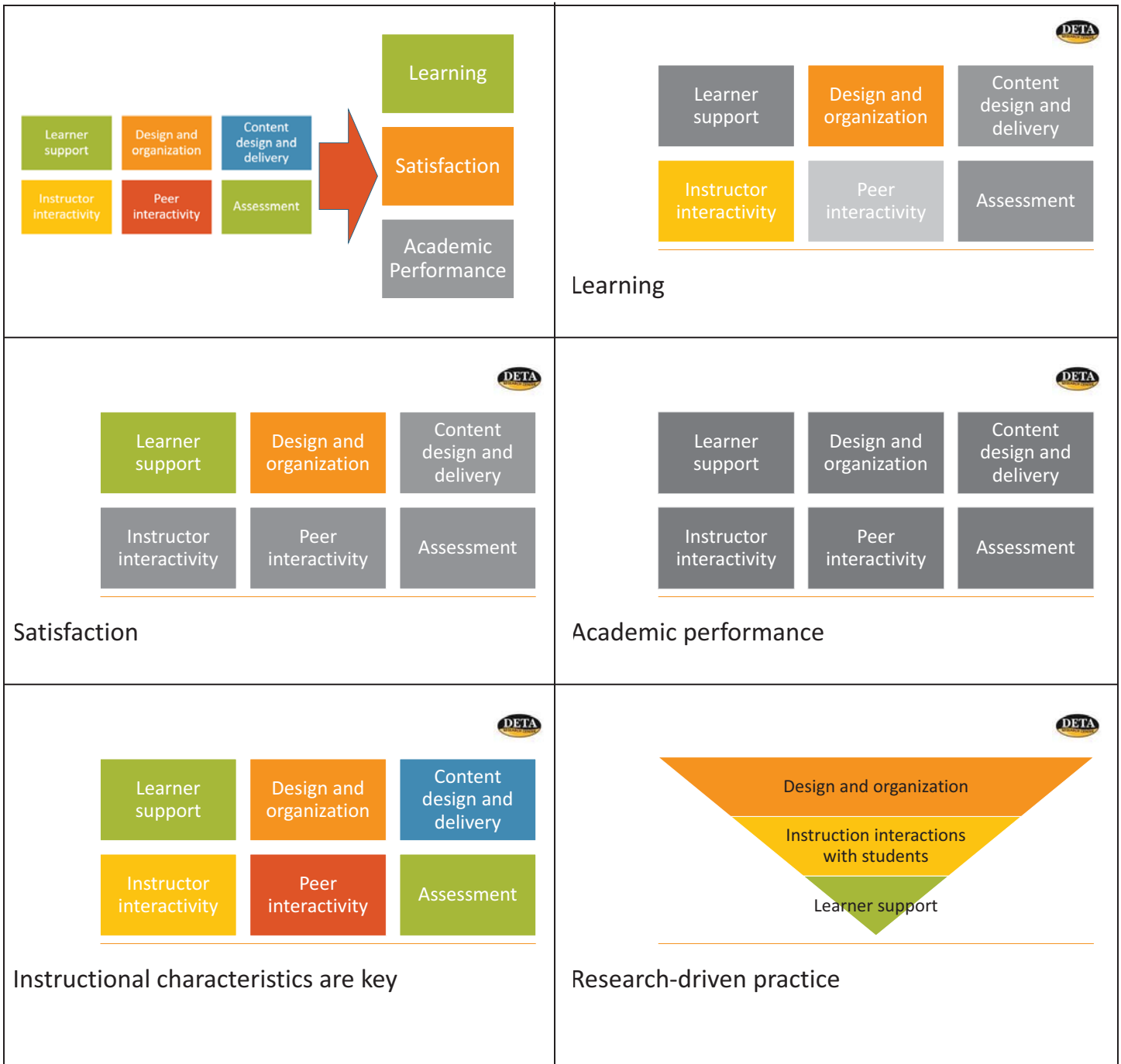



Instrumentation



Learner support	Design and organization	Content design and delivery
Instructor interactivity	Peer interactivity	Assessment

Instructional characteristics




 National Research Center for
 Distance Education and Technological Advancements
 UNIVERSITY OF WISCONSIN - MILWAUKEE

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[#DETAResearch](https://twitter.com/DETAResearch)

Tanya Joosten, tjoosten@uwm.edu

Synchronous Online & In Person Classrooms: Challenges & Rewards Five Years Into Practice

Elsbeth Magilton

University of Nebraska–Lincoln

Nebraska Law's online Space, Cyber, and Telecommunications Law program is a part-time online option for industry professionals. The online LL.M. (a post-law degree masters level program) was created in 2012 to address the growing demand for the program by experienced practitioners who want to obtain an LL.M. degree while maintaining their existing work - however our online LL.M. demands students to "attend" classes synchronously with students who attend on-campus. Initially the program utilized Adobe Connect for our virtual classrooms, but we have since moved to a mixture of Zoom and other VoIP services in conjunction with classroom management tools. Student feedback tells us that our live, real-time, interaction has been key in the success of our program but it certainly has presented many hurdles and logistical challenges.

This presentation will discuss why we believe this "in-person facetime" in online instruction is valuable, the challenges of maintaining an in-person classroom and a virtual classroom at the same time, what platforms have been successful and why, and a frank conversation of the challenges we are still addressing.


Importance:

- (1) An understanding the uses and limitations of several high-profile virtual classroom options.
- (2) The benefits and the draw-backs to managing online students and on-campus at the same time in class.
- (3) Why we believe this "in-person facetime" in online instruction is valuable.
- (4) Solutions we've learned - via trial and error - in teaching, testing, and providing student services to remote students at the post-doctoral level.

**SYNCHRONOUS ONLINE AND IN-PERSON CLASSROOMS:
CHALLENGES AND REWARDS FIVE YEARS
INTO PRACTICE**


ELSBETH MAGILTON, JD
UNIVERSITY OF NEBRASKA COLLEGE OF LAW
EXECUTIVE DIRECTOR
SPACE, CYBER, AND TELECOMMUNICATIONS LAW (SCTL)

TWITTER: @SPACECYBERLAW
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PHONE: 402-472-1662



**ABOUT MY ROLE IN
OUR PROGRAM**

- Executive Director
- Former Web Developer
- Attorney
- Researcher / Defense Connection
- Student Advocate, Faculty Advocate



SPACE, CYBER, AND TELECOM LAW (SCTL) DEGREE OPTIONS

Undergraduate Degree

Juris Doctorate (J.D.)

J.D. with Specialization


LL.M.
Latin Legum Magister

J.S.D.
Doctorate of Jurisdictional Sciences


This is what we offer online but all three may be in the physical classroom

DETAILS OF ONLINE LLM OPTION

- Only open to SCTL LL.Ms
 - Post-doc/post-law degree students
 - All required SCTL courses and most electives
- Admit approx. 2-4 online students per year
 - No more than 3 in any give class (prefer 1 or 2)
- On campus students may request recordings but may not attend online
 - Protect online environment and minimize tech complications
 - Different tuition rates (flat rate vs. hourly)
 - Different course planning and timeline (full vs. part time)
 - Different attendance requirement (100% vs. 75%)
- On campus and conference requirements
 - 3 credit hours must be completed on campus
 - Student fees cover DC Conference travel one time



WHAT DO WE MEAN BY SYNCHRONOUS?




What I assume their bosses think is happening.

WHY WE DO IT THE WAY WE DO

Real Talk: Our faculty was skeptical of online teaching and this option made it easier to push through our curriculum committee.

But it's not entirely that crass.

We also believe strongly in the method of legal education. The idea is that students teach themselves and come prepared to class to discuss a large quantity of information – including subjecting themselves to the Socratic method.




NEEDS DRIVEN DECISIONS

- Cost / University Relationships
- Visual Communication
- Audio Communication / VoIP
- Chat Functions
- Privacy vs. Ease of Access
- Recording Capabilities
- Content Management/Sharing
 - Blackboard
 - Canvas
 - TWEN

HOW WE DID IT

Adobe Connect (2012-2017)



- Individual classroom URLs (ditched this 4 semesters in)
- Students and faculty had their own accounts
- Accounts “placed” in classrooms

HOW WE DID IT

Adobe Connect (2012-2017)





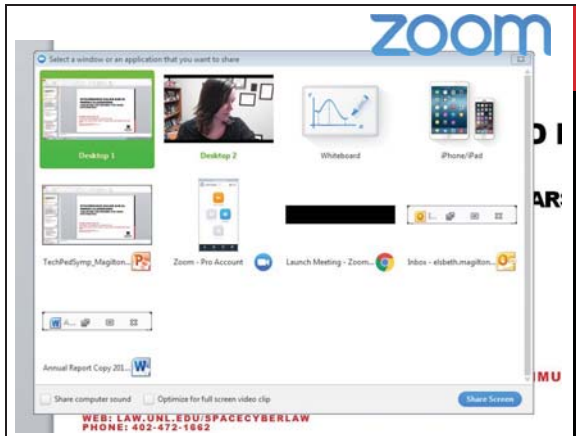
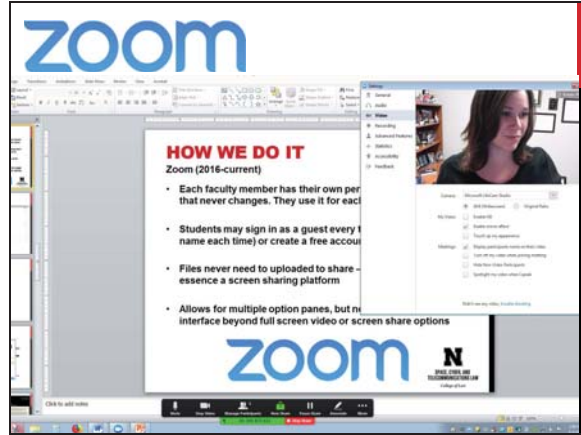
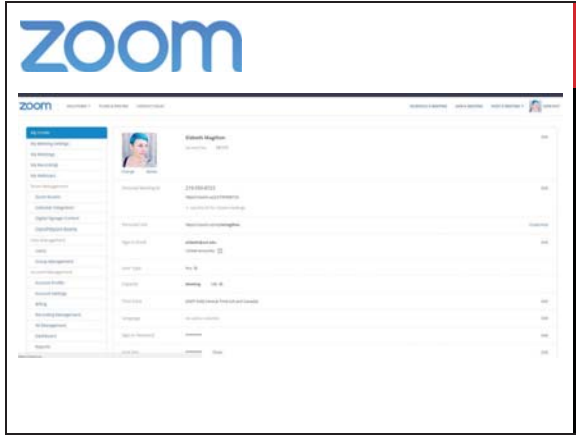
- Hard to integrate many types of media
- Consistent frustration with video and power points
- Default settings requiring repeat daily changes
- Audio struggles
- Overwhelming options

HOW WE DO IT

Zoom (2016-current)

- Each faculty member has their own personal Zoom Room that never changes. They use it for each and every class.
- Students may sign in as a guest every time (entering their name each time) or create a free account to sign in to.
- Files never need to uploaded to share – Zoom is, at its essence a screen sharing platform
- Allows for multiple option panes, but no formal, full screen interface beyond full screen video or screen share options



EXAMS

We use a program called Exam 4, which is also what all our on-campus students use.

In person students receive the exam questions in hard copy and only use Exam 4 to respond.

Exam 4 can restrict access to hard drive and internet.

Online students receive a file to open with the question. The moment the file is opened it reports to the software to ensure the same time limits are respected.

Up and down success – high level of tech fluency is needed.

THE REALITY

The Good

- Wider pool of colleagues and alumni
- Greater breadth of experience contributing
- Program strength from additional student volume
- Offering a part time option to those who can't quit their job for a year

SUCCESS STORIES

THE REALITY

The Bad

- Faculty has to split their attention while teaching
- Different attendance policies causes discord
- Distance makes group study challenging
- Disconnected from the institution and the program (easy to slip through the cracks)

THE REALITY

The Ugly

- Tech is tech – sometimes it fails and stalls class and disrupts teaching and valuable conversation
- Distraction can lead to resentment
- Audio is biggest challenge
- Can't 100% control what tech is being used on the other side

MY RESPONSE AS EXEC DIRECTOR

I'm a lawyer. Lawyer's research problems and solve them by evaluating evidence that makes certain solutions more advantageous or persuasive than others.

Some of my favorite instructional design materials:

Scott, P.A. (1994). A comparative study of students' learning experiences in intensive and semester-length courses and of the attributes of high-quality intensive and semester course learning experiences. Paper presented at the meeting of the North American Association of Summer Sessions (Portland, OR, November 16, 1993).

Scott, P.A. (2003). Attributes of High-Quality Intensive Courses. *New Directions for Adult and Continuing Education*, 2003(97), 29-38. Wiley Periodicals, Inc.

Laves, Elizabeth (2018). The Impact of Teaching Presence in Intensive Online Courses on Perceived Learning and Sense of Community: A Mixed Methods Study, 28-35

BACK TO BASICS

What we want (for all students, everywhere):

- greater continuity of learning
- greater concentration/focus on learning
- longer class sessions
- mental investment and commitment
- preventing performance affected by fewer concurrent classes, short duration, retention and understanding, absences, procrastination
- decrease in (or no) superfluous material
- classroom community and professional bonding
- student-teacher relationship formation/professional bond
- classroom atmosphere, clarity of instructor expectations

These goals are achieved through certain relationships...



RELATIONSHIPS

- **Student to Teacher (meh.)**
 - Split classroom attention
 - Technical barriers
 - Pre/Post class relationship building
- **Student to Student (OK.)**
 - Chat box use and email tends to create a bond between online students particular. On rare occasion good relationships form between on-campus and online students
- **Student to Content (good!)**
 - Students receive content the same way students in the classroom do

STUDENT TO STUDENT SOLUTIONS

Building Community and Connections

- Required online to on-campus project collaboration
- Social events and community building during residential visits and conferences
- Student "meet-up" study "rooms"
- 2018 Thesis-Palooza

STUDENT TO PROFESSOR SOLUTIONS

- **More robust, back of room, technology and screens**
- **More dedicated, on-hand, IT staff**
 - Support for setting up each class, every session
- **Stream line access of information and communications**
 - Rather than in-person they connect via email, the online classroom, and the CMS. Can this be simplified to model relationships more similar to on-campus students?
- **Teaching "live" to the groups separately:**
 - Focus solely on online students and building their community
 - Teach a separate section to on-campus students
 - Solves some problems, but also removes some benefits

BARRIERS

It becomes a number game: justifying separate sections requires a big influx in student enrollment. To reach that number I have to max out slots in our current courses – worsen student experience in the meantime/growth period.

Additionally budget + internal politics

- IT Support
- Hardware
- Recruitment Costs

MOVING FORWARD

Where do I go from here?

- **Maximize current capabilities: Work-a-rounds to backroom monitors and other tech challenges**
- **Visit my online students, be even more mindful of their time in Nebraska, increase opportunities for in-person bonding**
- **Increase online interactions (thesis, research, presentations)**
- **Have on campus students sign into Zoom during class**

THANK YOU

We Nudge and You Can Too: Improving Outcomes with an Emailed Nudge

Ben Smith

University of Nebraska at Omaha

Near the end of the semester, students who've placed little importance in your course will wonder: "what's my grade?" This realization often happens so late that no amount of effort will result in an acceptable grade.

What if students cared as much about their grade at the beginning of the semester as they do at the end? This is the idea behind 'Grade Nudge.' 'Grade Nudge' is a free application written by the presenter that sends the following message to each student over e-mail:

"Hi [Name], As of now, you have a(n) [Grade] in the class. This assignment is worth [Points] points. If you get more than [X] on this assignment, your class grade will increase to a(n) [Higher Grade]. If you get less than [Y] on this assignment, your grade will drop at least one grade. Not doing the assignment will result in a(n) [Lower Grade]." where each of the above variables are filled in for the individual student.

As shown in (Smith et al., 2018), this message resulted in a four percentage-point increase in homework scores. Further, this activity requires no class time and can be sent out by the instructor in less than three minutes.

References:

Smith, Ben O., et al. "Improved grade outcomes with an e-mailed "grade nudge"." *The Journal of Economic Education* 49.1 (2018): 1-7.

Importance:

1. Participants will be shown evidence of Grade Nudge's effectiveness
2. Participants will be shown step-by-step instructions to implement the Grade Nudge in their classes
3. Participants will be provided the resources to address edge cases such as very large classes and when assignments replace existing grades

IMPROVED GRADE OUTCOMES WITH AN E-MAILED 'GRADE NUDGE.'

Ben Smith Dustin White Patricia Kuzyk James Tierney
Presentation at Innovation in Pedagogy and Technology Symposium

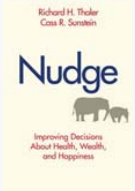


University of Nebraska at Omaha

Washington State University

The Pennsylvania State University

Published: *The Journal of Economic Education*
<https://doi.org/10.1080/00220485.2017.1397570>

INSPIRATION

TREATMENT

Hi [Name],

As of now, you have a(n) [Grade] in the class. This assignment is worth [Points] points. If you get more than [X] on this assignment, your class grade will increase to a(n) [Higher Grade]. If you get less than [Y] on this assignment, your grade will drop at least one grade. Not doing the assignment will result in a(n) [Lower Grade].

RANDOMIZED TRIAL

EXPERIMENT SETUP

$$S_{ij} = \beta_0 + \beta_N \text{Nudge}_{ij} + \mu_i + \gamma_j + \varepsilon_{ij}$$

- μ_i : Individual Fixed Effects
- γ_j : Assignment Fixed Effects
- S_{ij} : Assignment Score [0-1]
- Nudge_{ij} : Treatment (0 or 1)

REGRESSION RESULTS

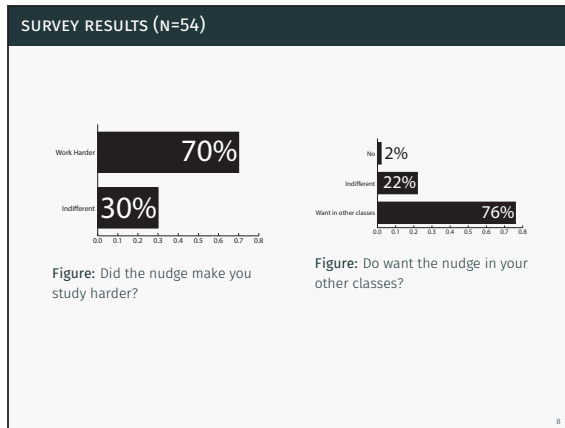
	Sports Fall 2014	Sports Fall 2015	All Sports	Micro Fall 2016	All
β_N	0.044	0.052	0.047	0.034	0.038
Cluster-Bootstrap P-Value	0.072	0.295	0.045	0.048	0.005
Observations	204	110	314	462	776
Students	34	22	56	66	122
Assignments	6	5	11	7	18

FIRST NUDGE

	Sports Classes	All Classes
β_{NF}	0.107	0.106
Cluster-Bootstrap P-Value	0.057	0.043
β_N	0.031	0.033
Cluster-Bootstrap P-Value	0.214	0.021
Observations	314	776
Students	56	122
Assignments	11	18

$$S_{ij} = \beta_0 + \beta_{NF} \text{Nudge First}_{ij} + \beta_N \text{Nudge}_{ij} + \mu_i + \gamma_j + \varepsilon_{ij}$$

STUDENT PERCEPTIONS





WHAT YOU NEED...

1. Google Drive Account
2. Your Gradebook
3. Your Gradescale
4. Nudge

THE GRADEBOOK

A	B	C
name	email	points
Joe	joe@bensresearch.com	250
Ben	ben@bensresearch.com	200
Jane	jane@bensresearch.com	275

THE GRADESCALE

Grade	threshold
A	0.93
A-	0.9
B+	0.87
B	0.83
B-	0.8
C+	0.77
C	0.73
C-	0.7
D+	0.67
D	0.63
D-	0.6
F	0

THE INTERFACE

THE E-MAIL

Hi Ben,

This is a reminder that you have homework three due in seven days.

As of now, you have a(n) D in the class. This assignment is worth 100.00 points. If you get more than 68.00 (68%) on this assignment, your class grade will increase to a(n) D+. If you get less than 52.00 (52%) on this assignment, your grade will drop at least one grade. Not doing the assignment will result in a(n) F.

LIVE DEMO

1. Sending a grade nudge over email
2. Sending a grade nudge with a 'replace' column
3. Sending a file with a grade nudge
4. Sending a grade nudge using an outside tool

QUESTIONS

<https://bensresearch.com/nudge>

It Takes a System to Build an Affordable Content Program

**Brad Severa,^{1,2} Jane Petersen,^{1,3} Kimberly Carlson,³ Betty Jacques,³
Brian Moore,² Andrew Cano,² and Michael Jolley²**

1 University of Nebraska Information Technology Services

2 University of Nebraska–Lincoln

3 University of Nebraska at Kearney

Since 2006, the price of textbooks has dramatically exploded, with the cost of a college text book increasing more than four times the rate of inflation. This cross-campus panel includes Faculty, an Instructional Designer, Librarian and ITS Staff discussing how to build an affordable textbook program. The UNK members will share learning outcomes from the Kelly Grant project including; using OER materials in courses, converting to digital textbooks, lessons learned and helpful hints for success. The UNL members will introduce the Digital Materials Initiative opportunities at the Lincoln campus. A UNL faculty member will discuss his years of experience in creating and using an iBook in his course, and how it has evolved over the years in his department.

This is an open panel conversation for the audience to ask questions about OER and for faculty to share their experience with teaching and using OER materials in their course. It takes many people from different specialties, working across campuses to create real impact for students. This large panel represents just a portion of the many people needed to implement all the tools and methods required to create positive change for the University of Nebraska system.

Importance:

1. Open Educational Resources (OERs)
2. Affordability
3. Resources for Faculty
4. Improving Learning Outcomes



It Takes a System to Build an Affordable Content Program

Brad Severa (NU ITS - UNL), Jane Petersen (NU ITS -UNK), Kimberly Carlson (UNK), Betty Jacques (UNK), Brian Moore (UNL), Andrew Cano (UNL), Michael Jolley (UNL)

Jane Petersen UNK

ITS Director, Academic Technology and Client Services

Kimberly Carson UNK

Ph.D. Professor & Assistant Chair Biology Department

Brian Moore UNL

Ph.D. Music Education & Music Technology

University of
Nebraska
Lincoln
GLENN KIRFF
SCHOOL OF MUSIC

University of Nebraska

red2go: Developing and Deploying Digital
College Curriculum



Andrew Cano UNL

Virtual Learning Librarian

Subject Specialist Librarians at UNL:

<https://libraries.unl.edu/subject-specialties>

Subject Librarians at UNO:

<https://www.unomaha.edu/criss-library/research-and-instruction/subject-librarians.php>

Liaison Librarians at UNMC:

<https://www.unmc.edu/library/contact/liaisons/index.html>

Librarians by Subject at UNK:

<http://guides.library.unk.edu/librariansbysubject>

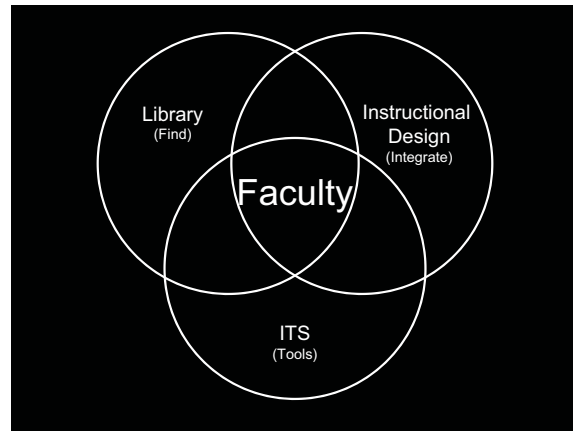
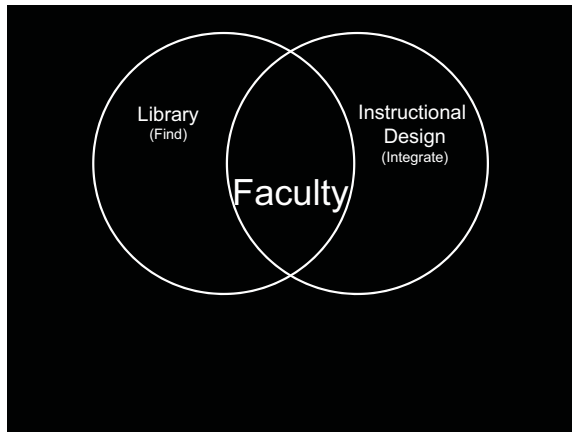
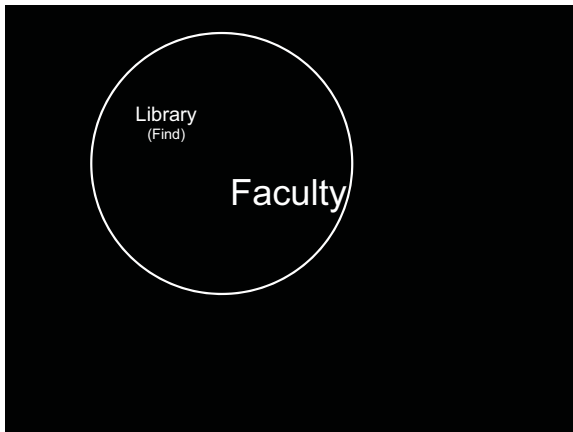
Michael R Jolley UNL

Instructional Design Technology Specialist

teaching.unl.edu

Brad Severa UNL
Academic Technology Specialist

Faculty



It Takes People

- UNK Kelly Grant
Jane Petersen
Betty Jacques
Kimberly A Carlson
- UNL Kelly Grant
Innovative Instructional Design
Marie Barber
Bev Russell
Sushma Jolly
Michael Jolley
Stefanie J. Zahourek
Guleswende Rouamba
- Libraries
Andrew J. Cano
Catherine Fraser
Riehle
Charlene Maxey-Harris
- Information Technology Services
Heath Tuttle
- Grant Reviewers / Endorsers
Brian Moore
Sue Gardner
Mackenzie Savaiano
Patricia Simpson
- UNL Faculty Cohort
David Mable
Libby Jones
Courtney Hillebrecht
Patrice McMahon
Guy Trainin
Carolyn Brown
Kramer
Allan Donsign
Nathan Wakefield
- Guest Speakers
Kristi Jensen
Program Development Lead, eLearning Support Initiative
University of Minnesota
Karen Gardner-Athey
OLIS Professional Development Training Coordinator
SUNY
- Academic Affairs
Amy Goodburn
Senior Associate Vice Chancellor & Dean of Undergraduate Education
- Susan M. Fritz
Executive Vice President and Provost
- Donde Plowman
Executive Vice Chancellor & Chief Academic Officer
- STAR Initiative
- Other Partners
- Unizin
Engage
Pressbooks
- Follett
Meet Deadlines
Discover
Included

- UNK Kelly Grant
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Kimberly A Carlson
- UNL Kelly Grant
Innovative Instructional Design
Marie Barber
Bev Russell
Sushma Jolly
Michael Jolley
Stefanie J. Zahourek
Guleswende Rouamba
- Libraries
Andrew J. Cano
Catherine Fraser
Riehle
Charlene Maxey-Harris
- Information Technology Services
Heath Tuttle

Successful
Teaching
Affordable
Resources

Supporting Strategies and
Tools

- Order Books by Deadline

Supporting Strategies and
Tools

- Order Books by Deadline
- Follett Tools
 - Discover & IncludED

Supporting Strategies and
Tools

- Order Books by Deadline
- Follett Tools
 - Discover & IncludED
- Unizin Tools
 - Engage & Pressbooks

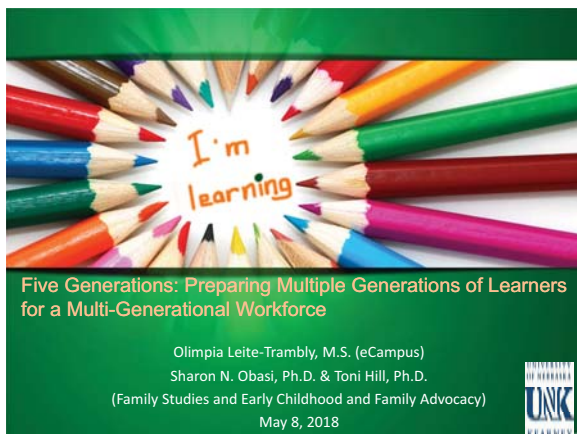
Questions


Five Generations: Preparing Multiple Generations of Learners for a Multi-Generational Workforce

Olimpia Leite-Trambly, Sharon Obasi, Toni Hill

University of Nebraska at Kearney

For the first time ever, we have five generations working simultaneously in the workforce. This diversity provides unique opportunities and challenges for employers and managers. Oftentimes before this diverse workforce enters employment, universities and colleges were charged with preparing and educating them. Unlike online teaching, traditional teaching with reading assignments and paper-pencil tests may lend itself better to educating a generationally diverse student group. Online teaching multiple generations is more challenging especially when attempting to encompass several generations of diverse learners. Instructors must consider and include both the digital native and the digital novice or digital immigrant when designing instructional and assessment material. Instructors may have a student with a dozen or more devices and another student with only one “dumb” phone. Additionally, instructors need to consider issues of accessibility and equity in designing instructional and assessment materials across multiple generations. Current research on the characteristics of the five generations of employees includes an examination of education values, communication style, and motivation across the generations. This presentation will demonstrate how instructors can use the intergenerational workforce research to effectively design an intergenerational-inclusive online course.





Five generations in the workforce

- What is the age of the **youngest** student you have worked with?
- What is the age of the **oldest** student you have worked with?
- What were the issues?



Texting Bride


<https://www.youtube.com/watch?v=47EDdvSqn7Y>



CELL PHONE?

- Sleep with it?
- Gen Y, Z = 70% sleep with phone near
- Text-walk, 50%
- Other place?

• Millennials and Gen Z, Inc., 2017



150 times / day	3 hours / day
Students check their mobile devices on average of 150 times per day	On average students spend 3 hours using their mobile device
Flurry Insights (Yahoo) 2014	Kleiner Perkins 2014





Stocking by iStock? (2016) Photo: Steve Rich (comphotos/buget/181823232)
Photo: Photo: iStockphoto.com/SteveRich/181823232
Photo: Photo: iStockphoto.com/SteveRich/181823232



QUIZ

- ATM
- BRB
- BTW
- B4N
- L8R
- IDC
- CUL8R
- AFAIK
- GR8
- ILY
- IMHO
- BTDT
- LMK
- LOL


• Site: <http://www.teachmean.com/2014/04/18/100-abbreviations-quiz/>



QUIZ


- ATM – Automated Teller Machine, At the moment
- BRB – Be right back
- BTW – By the way
- B4N – Bye for now
- L8R – Later
- IDC – I don't care
- CUL8R – See you later
- AFAIK - As far as I know
- GR8 – Great
- ILY – I love you
- IMHO – In my humble opinion
- BTDT – Been there done that
- LMK – Let me know
- LOL – Laugh out loud

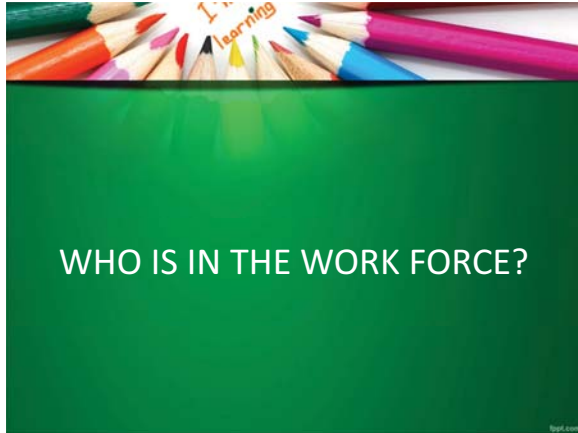
• Site: <http://www.teachmean.com/2014/04/18/100-abbreviations-quiz/>



Differences

- **How and where did Kennedy die?**
- Assassination in Dallas, TX – Traditionalist, Baby Boomer
- Plane crash near Martha's Vineyard, MA – Gen X
- Kennedy who? – Gen Y, Gen Z

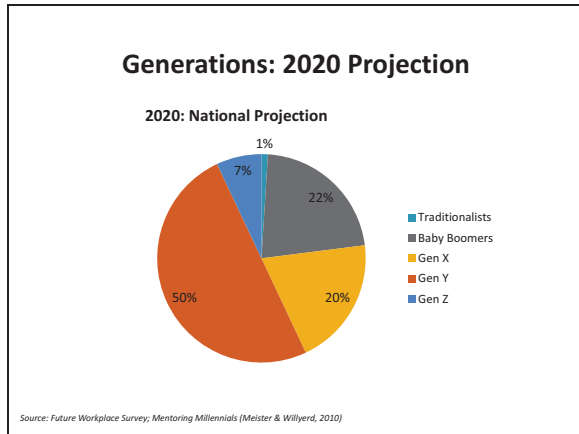
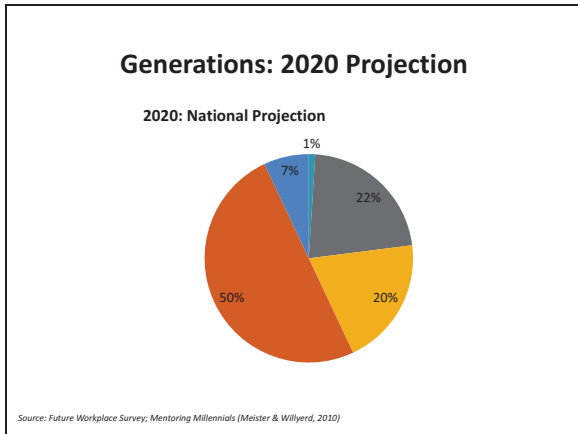




WHO IS IN THE WORK FORCE?



- Traditionalists (1922-1945)
- Baby Boomers (1946-1964)
- Generation X (1965-1980)
- Generation Y, Millennials (1981-2000)
- Generation Z, Gen 2020, iGen, Post-millennials (2001-present)



Generations

- Research indicates that people communicate based on their generational backgrounds.
- Each generation has distinct attitudes, behaviors, expectations, habits and motivational buttons. Learning how to communicate with the different generations can eliminate many major confrontations and misunderstandings in the workplace and the world of business



Generational differences can affect:

- recruiting
- building teams
- dealing with change
- motivating
- managing
- maintaining and increasing productivity
- communication misunderstandings
- high employee turnover
- difficulty in attracting employees
- gaining employee commitment



- An Interview

<https://www.youtube.com/watch?v=Uo0KjdJr1c>



TRAITS

- Traditionalists (1922-1945)
- Baby Boomers (1946-1964)
- Generation X (1965-1980)
- Generation Y, Millennials (1981-2000)
- Generation Z, Gen 2020, iGen, Post-millennials (2001-present)



Keys to Success in Multigenerational Classrooms

- Open recognition of the value of each generation.
- Establish an even playing field
- Encourage collaboration to develop critical thinking skills.



Work Environment

- This employee likes to work alone; own office space; own projects; competitive

- Traditionalists (1922-1945)
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Commitment to Work

- This employee expresses workplace loyalty; work is a duty; work is priority

- Traditionalists (1922-1945)
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Commitment to Work

- This employee expresses workplace loyalty; work is a duty; work is priority

- Traditionalists (1922-1945)



Technology

- This employee is a TRUE digital native; technology is easy to use; instinctive use; adaptive to platforms, technology

- Traditionalists (1922-1945)
- Baby Boomers (1946-1964)
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Technology

- This employee is a TRUE digital native; technology is easy to use; instinctive use; adaptive to platforms, technology

- Generation Z, Gen 2020, iGen, Post-millennials (2001-present)



Communication

- This employee / student likes to communicate face-to-face; relies less on technology for communication; prefers in-person meetings
- Traditionalists (1922-1945)
- Baby Boomers (1946-1964)
- Generation X (1965-1980)
- Generation Y, Millennials (1981-2000)
- Generation Z, Gen 2020, iGen, Post-millennials (2001-present)




Communication

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Technology-free or Technology-friendly?


- How do you use technology, cell phones in class?



Pew, 2018

- 95% all American adults use cell phones (77% smart phones)
- Racial/ Ethnic

	All phones	Smart	Other
White	94%	77%	17%
Black	98%	75%	23%
Hispanic	97%	77%	20%




GENERATIONAL OVERVIEWS



Similarities

- Financial Conservatives
- Traditionalists (1922-1945); Generation X (1965-1980); Gen Z (2001 – present)
- *Digital First to Digital ONLY; using the internet to make purchases, less brick and mortar stores* (Generation Y, Millennials (1981-2000); Generation Z, Gen 2020, iGen, Post-millennials (2001-present)



Work Place

WORKPLACE	Traditional	Baby Boomers	Gen X	Gen Y	Gen Z
Work ethics	Hard working	Workaholic	Work only as hard as needed	Work, change the world	Secure, money
Workplace success	Deadlines 84% Along 81%	Deadlines 77% Along 78%	Deadlines 75% Along 71%	Deadlines 62% Multi-tasking 59%	
Supervision	Some feedback	Some feedback	Immediate, continuous	Immediate, continuous	
Work/Life	Family secondary	Work first	Value Balance	Value Balance	Likely Balance





LEARNING AND LEARNERS



There is no Single Student Profile

- Different interests
- Backgrounds
- Talents
- Motivations
- Goals
- Different relationship with technology

Teaching?

“Students do not need a teacher, they have ‘google’”



What do Students need?

- Validate students’ diversity
- Encourage students’ strengths
- Motivate students’ needs
- Nurture a sense of community



What do faculty need?

- Flexibility
 - Different Pedagogy
 - Learning Strategies
- Support team
 - Other instructors – support team
 - eCampus / Instructional Designers
 - Help Desk
- Resources



What do faculty need?

- Partnerships
 - Graduate Programs
 - Certification
 - Employers
 - Professional Associations
- Credentialing
 - Documented learning
 - Competencies

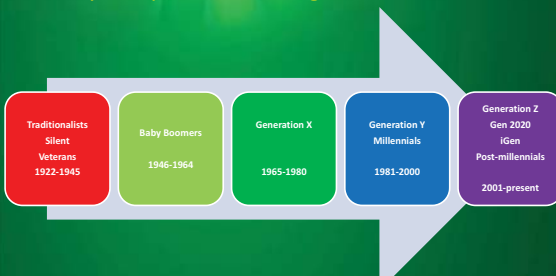



Multi-modal learning Strategies

- Visual
- Aural
- Read/Write
- Kinesthetic




Identify one person in each generation

Assignment across generations







Overview

- Employees (Instructors), Students, and Generations
- Engagement
 - Interpersonal Communication
- Learning

• *There is little research on FIVE generations of workers and even less on five generations of learners*


THANK YOU!

- Contact:
 - leitetrambod@unk.edu
 - obasis2@unk.edu
 - hillti@unk.edu



Selected References

- Meister, J. C. & Willyerd, K. (2010). Mentoring millennials. Retrieved: <https://hbr.org/2010/05/mentoring-millennials>
- Patel, D. (2017). 8 ways generation Z will differ from millennials in the workplace. Forbes. Retrieved: <https://www.forbes.com/sites/deappatel/2017/09/21/8-ways-generation-z-will-differ-from-millennials-in-the-workplace/#73edc2f376e5>
- Pew Research Center: Internet & Technology. (2018). Mobile Fact Sheet. Retrieved: <http://www.pewinternet.org/fact-sheet/mobile/>



Selected References

- Tolbize, A. (2008). Generational differences in the workplace. Research and Training Center on Community Living. Minneapolis: University of Minnesota.
- Shah, R. (2015). Working beyond five generations in the workplace. Retrieved: <https://www.forbes.com/sites/rawnshah/2015/02/23/working-beyond-five-generations-in-the-workplace/#11637da5296e>
- Shah, R. (2011). Working with five generations in the workplace. Retrieved: <https://www.forbes.com/sites/rawnshah/2011/04/20/working-with-five-generations-in-the-workplace/#3acf66a03e7a>

Schedule NU! Schedule SC!

Cheri Polenske,¹ Jean Padrnos,¹ and Corrie Svehla^{1,2}

1 University of Nebraska Information Technology Services

2 University of Nebraska–Lincoln

One of the goals of OneIT is to maximize the purchasing power by consolidating contracts and utilizing common systems. UNK, UNL and UNO utilized a product called EMS for event scheduling. CSC, UNL and UNO used R25/S25 for academic scheduling. The University was able to license the EMS scheduling solution for all of the Universities and State Colleges for both academic scheduling/optimization and event scheduling in one contract. The implementation of the shared EMS system is underway and will go-live mid to late 2018.



Assessment Avenue

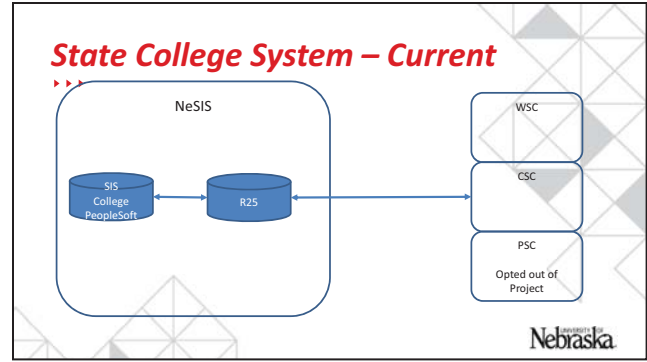
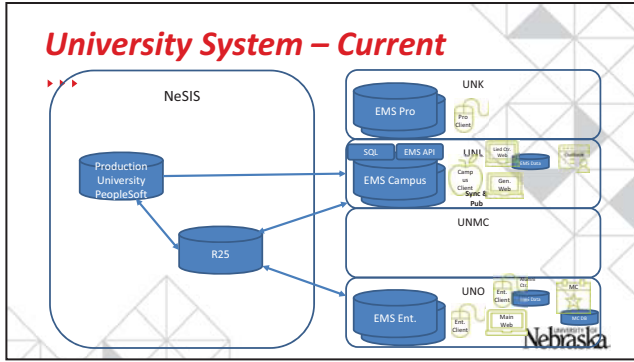
- UNK – EMS for event scheduling
- UNL – EMS for event scheduling/publishing of academic schedule
R25 for academic scheduling
- UNO – EMS for event scheduling
R25 for academic scheduling and optimization
- UNMC – Separate third party vendor solutions for event scheduling
Evaluating EMS
- CSC – R25 for event and academic scheduling
- WSC – Separate third party vendor solution for event scheduling
- PSC – Opted out

ONE UNIVERSITY. FOUR CAMPUSES. ONE NEBRASKA. University of Nebraska

Assessment Avenue

- Consolidation of contracts and systems
- Create collaborative users groups
- R25 is being sunset 
- Reporting capabilities
- Retirement of additional third-party products

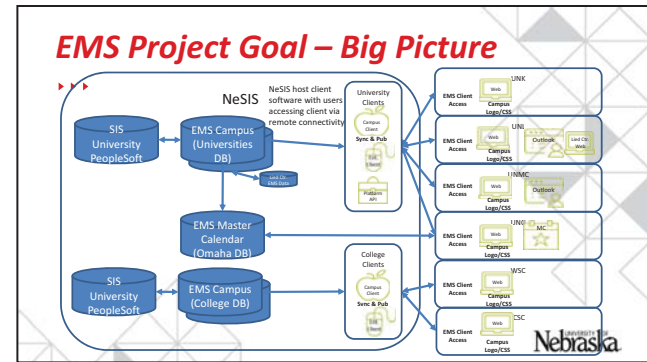
ONE UNIVERSITY. FOUR CAMPUSES. ONE NEBRASKA. University of Nebraska



Transformation Thoroughfare

- 2 EMS instances
- Consolidated database for events and academics
- Enhancement of tools
- Users groups for collaboration

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Task Track

- Infrastructure
- Application installation
- Data merge
- Data cleanup and consolidation
- Collecting campus usage needs

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Training Trail

- Collaboration!
- Hands on learning!
- Streamlining and automation!

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See It & Believe It

(Assessing Professional Behaviors & Clinical Reasoning with Video Assignments)


Grace Johnson and Megan Frazee
University of Nebraska Medical Center

Professional behaviors and clinical reasoning skills are developed through repetition, modeling and multiple exposures. We developed video assignments in physical therapy education that allow students to integrate didactic knowledge into clinical cases. These assignments require students to demonstrate appropriate professional behaviors, psychomotor skills and clinical reasoning required for physical therapy patient management. For all video assignments, students are required to upload their videos into Canvas, view the work of their peers and provide constructive feedback. These video assignments allow faculty to assess professional behaviors and clinical reasoning of students and facilitate student interaction between sites.

See It & Believe It:

Assessing Professional Behaviors and Clinical Reasoning with Video Assignments

Grace C. Johnson, PT, DPT, OCS (gcjohnson@unmc.edu)
Megan Frazee, PT, DPT, OCS, FAAOMPT (mfrazee@unmc.edu)




University of Nebraska
Medical Center
COLLEGE OF ALLIED HEALTH PROFESSIONS

Objectives

Attendees will:



- Recognize the value of video assignments in assessing professional behaviors, and clinical reasoning skills.
- Understand the role of video assignments in facilitating peer-to-peer interaction in distance or online education.
- Incorporate a video assignment as a form of student assessment.



Physical Therapy Education

Comprised of:

- Traditional lecture, reading, discussion
- Laboratory (psychomotor skills)
 - Tests, measures, interventions
 - Safety -- Body mechanics of the therapist, patient handling
 - Communication




Professionalism in PT: Core Values

Accountability
Altruism
Compassion/Caring
Excellence
Integrity
Professional Duty
Social Responsibility




Evaluating Professional Behaviors



Lab Practical Exams

- 1st year students demonstrate tests, measures, or interventions on a standardized patient
- Faculty evaluate their performance
 - Psychomotor skills
 - Patient safety
 - Therapist safety
 - Communication – introduce self, shake hands with patient, instructions in layperson terminology

First-year PT Students



- Building foundational knowledge
- Building foundational skills
- Communication
 - With strangers – “patients”
- Hearing your voice!
- Taking charge of the patient encounter

Discussion Board Assignment → Video Project

Example: Tests & Measures Video Case #2

A 27-year-old patient with a 3-week history of right side neck pain and headaches is seen in physical therapy. He plays guitar and sings in a country western band and has increased pain during this activity. He demonstrates the following findings with sitting posture:


- Forward head
- Forward, elevated, and internally rotated shoulder posture, R > L
- Abducted and elevated scapulae, R > L
- Other exam findings include decreased L lateral flexion range of motion of cervical spine and tenderness to palpation of the suboccipital muscles.

Select a strength or muscle length test that should be included in this exam and complete the video assignment as instructed.

Basic Requirements

- Students work in groups of 3-4
 - Therapist, Patient, & videographer
- Each student selects a unique test or measure for the case
- Submit a single continuous video
- No self-recordings
- 2.5 minutes max video duration
- Provide feedback to 2 peers and post high quality constructive comments

• Video Example



Grading Rubric


UNMC PT Tests & Measures Video Project: Grading Rubric

Criteria	Points	Comments	Priority
Introduction	25		
Communication	25		
Test/Measure	25		
Summary	25		
Conclusion	25		
Professionalism	25		
Video Quality	25		
Total	150		

Heavily based on communication, verbal and nonverbal

- Explains purpose of the test
- Provides demonstration
- Uses lay terminology only
- Summarizes test results with patient
- Provides closure to the session
- No distracting habits (e.g. gum chewing, hair in face, odd facial expressions)
- Dressed professionally
- Good posture and positive body language

Assessing student development here and there



UNMC PT Program has a class comprised of

- 50 students in Omaha
- 16 students in Kearney

Most core faculty are here in Omaha with 3 faculty in Kearney

With video projects, faculty can see how students in the distant site are developing in regards to

- clinical decision making
- professional behavior

Second-year PT Students


Video Assignment

More challenging


- Patient case
- Select an exercise
- Instruct a patient in the exercise
- Provide patient education on exercise dosing

Communication & Professional Behaviors

- Still important



Oral Case Presentations



- Students are preparing for their first full-time clinical rotation
- “In this scenario, you are a student who is performing the evaluation without your Clinical Instructor (CI) in the room. You have just stepped out of the room to summarize the case for your CI before proceeding with the exam and treatment.”
- They are given the history and examination findings, and copies of the patient intake forms (6-8 pages of information)
- Goal is to pick out the key pieces of information that need to be shared with the CI to paint a clear picture of the patient
- Propose plan for treatment or need for referral if necessary
- <2 minutes total

Objectives for Oral Case Presentation Assignments:

After completing this assignment, students will be able to:

- Distinguish which elements of a case are the most critical to the diagnosis, prognosis, and plan of care.
- Summarize the key elements of a case in a clear and concise manner.
- Clearly communicate their findings to a clinical instructor, using the SBAR format.
- Provide high quality, constructive feedback to a peer.

Situation

Background

Assessment

Recommendation

Situation

- What is going on and why health care professionals are needed
- Should be brief
- “Rachel is a 17-year-old female presenting with a chief complaint of left ankle pain following an inversion ankle sprain two days ago”

Background

- Identifies and provides the diagnosis (or reason for seeking treatment), their medical status, and history
- Key info from the examination
- Do they belong in PT or need referral to another practitioner?
 - Screen for red/yellow flags

Assessment

- State what they believe the problem is based on examination findings
- Any impertinent information is avoided unless asked for

Recommendations

- Precise and descriptive explanation on exactly what the patient needs
 - Referral?
 - Plan for today's treatment

Rubric

Performance Elements	Exemplary	Accomplished	Developing	Needs Improvement /Failing	Score
Communication	Professional appearance. Presents persuasive and explanatory information in a logical sequence with clear and precise language. Utilizes notes as needed for key findings but maintains adequate eye contact and presents information in a conversational tone, without reading directly from a script.	Professional appearance. Presents information with a few ums, ahs, and pauses. Presents information in a logical sequence.	Professional appearance. Presents information with lots of ums, ahs, and pauses. Presents in an logical order or lacks transition phrases.	Unprofessional appearance. Poor expressive language. Clearly reading from script.	
Points	10 to >9	9 to >8	8 to >7	<7	___/10
Content	All elements of the case are presented concisely. No extraneous material is added.	All elements of the case are presented but with some extraneous material added.	All elements of the case are presented but with significant extraneous material added. Key content not selected.	Key elements of presentation are missing.	
Points	10 to >9	9 to >8	8 to >7	<7	___/10
Response to colleague	Contributions are made in a timely manner and provide high quality feedback with critical substance. Specific actionable feedback is present. This should include at least 1 specific area for improvement (there is always room for improvement).	Generally contributed in a timely way, and displayed a moderate level of feedback. Specific, actionable feedback is minimal (e.g. feedback is very general)	Student's contributions/feedback is superficial. No evidence of thoughtful evaluation. No specific feedback, (e.g. a version of "great job!" is not constructive or actionable feedback)	Participation is past the deadline or inadequate/misapropriate.	
Point Deduction	0	-1	-2	-4	Minus ___
Comments:					Total: ___ / 20

Communication

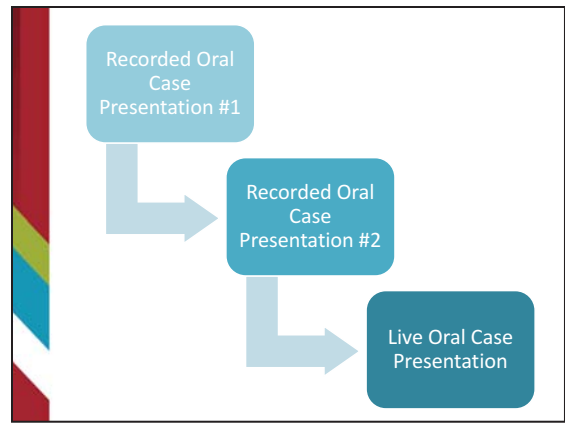
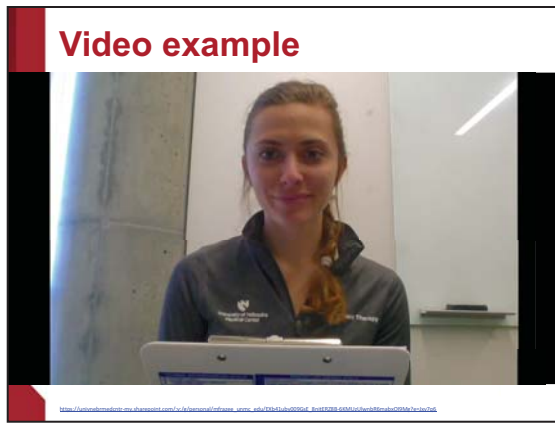
	Exemplary
Communication	<ul style="list-style-type: none"> • Professional appearance. • Presents persuasive and explanatory information in a logical sequence with clear and precise language. • Utilizes notes as needed for key findings but maintains adequate eye contact and presents information in a conversational tone, without reading directly from a script.
Points	10 to >9

Content

	Exemplary
Content	<ul style="list-style-type: none"> All elements of the case are presented concisely. No extraneous material is added.
Points	10 to >9

Response to Colleague

	Exemplary
Response to colleague	<ul style="list-style-type: none"> Contributions are made in a timely manner and provide high quality feedback with critical substance. Specific actionable feedback is present. This should include at least 1 specific area for improvement (there is always room for improvement).
Point Deduction	-0



Summary

- Video cases help to bring classroom/didactic information into more “real-world” situations
- Allows assessment of communication, professional behaviors, and clinical reasoning of individual students

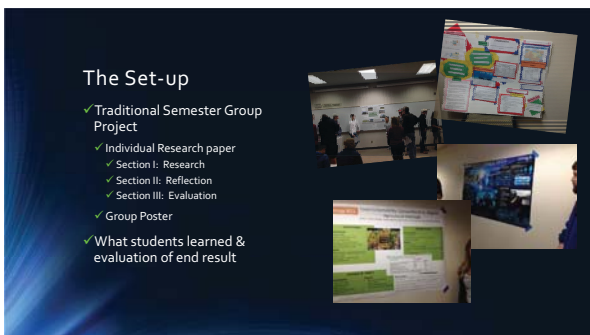
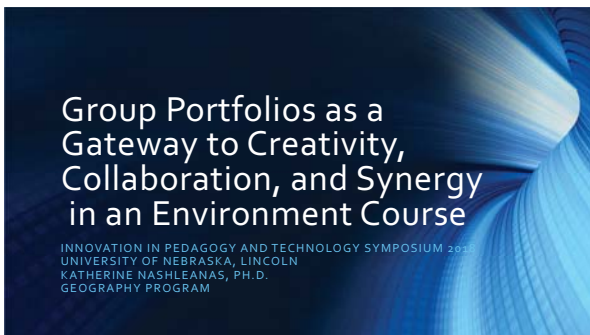


Group Portfolios as a Gateway to Creativity, Collaboration & Synergy in an Environment Course

Katherine Nashleanas

University of Nebraska–Lincoln

Recent studies have suggested the world students are facing today is moving so fast that the professions and skills they are training for now might be obsolete by the time they graduate. As a result, students in the 21st century need to think more flexibly, innovatively and creatively as well as practice in collaboration, negotiation and teamwork. With an entry-level class of 49 students in a hybrid course, groups were assigned with a semester portfolio project on the general topic of sustainability. Individual groups of students collaborated around their own sustainability message with each group member creating a portion of the portfolio using a medium of their choice. As students engaged collaboratively and creatively, they also became more powerfully and emotionally engaged in the course and topic than previous traditional research papers and posters routinely provided.



Project Organization

- ✓ All groups have the same theme: Sustainability
- ✓ Each group negotiates a single sustainability topic.

Challenges

- ✓ How to set up projects that encourage creativity

Outside Representatives Invited to Classroom

- City of Lincoln Planning Commission
- Chancellor's Committee on Sustainability
- UNL Center for Civic Engagement
- UNL Student Green Fund

Challenges

- ✓ How to set up projects that encourage creativity
- ✓ How to most effectively use technology as a medium of creativity
 - Video
 - Public Service Announcement
 - Web Page
 - Lesson Plan
 - Community Project
- ✓ How to evaluate the projects students will produce
- ✓ How to apply academic rigor to these objectives

Project Assessment

- Project Rubric
- Definition of Terms
- Group Montage
- Individual Project
- Project Paper
- Samples of Projects

Project Rubric

	9-10	7-8	5-6	3-4	1-2
Research	Very thorough research with correct source citations (or lack of cited in the paper)	Very thorough research with 2-3 quality citations used in the paper.	Good research that supports project but incomplete and weak use of the research cited in the paper.	Minimal quantity of research; independent of good research sources; few citations used in the paper.	Minimal quantity of research using only information from the course.
Integration	Student draws several clear connections between course material and course as a foundation for the project in several places and connects it to the course research the student has done.	Student makes references to the course in several places but does not link it to the course research the student has done.	Student makes references to the course in the paper but without much detail or explanation.	Student makes a single reference to course material generally in the introduction of the project.	Student doesn't use course material at all in the paper.
Systems	Student analyzes multiple pieces within the system to explain how systems.	Student references systems that connect to the project.	Student references systems to an aspect of the project.	Student acknowledges the presence of systems but does not clearly connect systems to the project.	The concept of systems is not mentioned in the paper.
Clarity	Student states the goal clearly and clearly illustrates the goal in the project.	Student states the goal of the project clearly but the project ends vaguely.	Goal of the project is stated but only generally and vaguely in the project.	Goal of the project is not clearly stated in the project.	The project doesn't have a clear goal.
Action	Project could be carried out with target population with little editing.	Project could be carried out with some additional thought and editing to be done to a target population.	Project is somewhat realistic but needs additional explanation through and follow-through.	Project has good general ideas but needs to be carefully developed to make it work for a target audience.	Project does not mention who will be the target audience.
Total:					

Project Assessment

- ✓ Project Rubric
- Definition of Terms
- Group Montage
- Individual Project
- Project Paper
- Samples of Projects

Definition of Terms

Research: quality of the research – based on scientific knowledge & principles. Student has reviewed How to do University-level Research in Canvas and has followed the instructions found there. Research also can include interviews and surveys.

Integration: How well project is integrated with what has been learned in class, draw on knowledge gained in class to help frame project, but don't stop there; use what you have learned in class and apply it to another area or topic. How well project extends beyond what is covered in class and texts (depth of the topic)

Systems: How well project illustrates idea of systems or demonstrates systemic thinking

Clarity: How clearly the project communicates the goals the individual has stated in the project proposal

Action: How realistic the project is and how well the project is linked to some form of action or community effort.

Project Assessment

- ✓ Project Rubric
- ✓ Definition of Terms
- Individual Project
- Group Montage
- Project Paper

Project Assessment

- ✓ Project Rubric
- ✓ Definition of Terms
- ✓ Individual Project
- Group Montage
- Project Paper

Project Assessment

- ✓ Project Rubric
- ✓ Definition of Terms
- ✓ Individual Project
- ✓ Group Montage
- ✓ Project Paper

Project Assessment

- ✓ Project Rubric
- ✓ Definition of Terms
- ✓ Individual Project
- ✓ Group Montage
- ✓ Project Paper
- ✓ Samples of Projects

Samples of Projects

The collage features several project samples:

- A poster titled "Building Leadership Skills Through Sustainability" with a tree illustration.
- A poster titled "The Problem with Paper Cups" with a recycling symbol.
- A poster titled "Reuse Reduce Recycle" with a recycling symbol and a link to "Alissa Fernandez's Website: <http://www.alissafernandez.com>".
- An "Event Scavenger Hunt" poster with instructions: "Students are to go to their floor and take a photograph of their recycling bin in the waste room. Return and show us the photo to receive a prize." and an "Individual Goal: Promote awareness of recycling areas within residence halls".
- A photograph of a recycling bin filled with paper cups.

Concluding Thoughts

- ✓ Meeting my goal
- ✓ Incorporating 21st Century skills:
 - ✓ Flexible and systemic thinking
 - ✓ Negotiation and collaboration skills
 - ✓ Management and group skills

Student Comments

- I am not a coffee drinker, so naturally, I don't really contribute much to this paper cup epidemic, however, this project did teach me a lot about how small things in the world can really add up and have a huge impact.
- This entire experience has been eye-opening and reading through my sources and typing the paper has taught me more than I ever thought I would about water bottle companies. The making of the posters was a fun way to visualize my project and make these facts easily accessible to the class.

Student Comments

- I always knew that my culture in the US was wasteful. There are signs everywhere telling people to reuse and recycle. How driving cars is bad for the atmosphere, and especially how the glaciers are melting. I brushed it aside thinking it's another problem politicians like to talk about, like women's rights and foreign policy. It never seemed to me like I could ever do anything to help or stop it, like I was one drop in a flood of people. This project taught me that there are a number of things that I can do to help our environment a great amount. I learned that the Earth is a big and complicated system, how harmful plastic and Styrofoam is, and that we are the god species. All of which have changed how I do things day to day.

Student Comments

- Although it may not seem like a big impact on people, sometimes it is better to leave the thought of it in their minds, that way they can take the initiative, even if it just means throwing an empty plastic bottle into the recycling bin instead of throwing it away into the trash can. The web page was created in order to make this happen. Consciousness. Awareness. The realization that waste and recycling are not just words, they are actually actions that are being taken, decisions to be made about where the waste goes in order to help conserve the environment. One action can lead to a dreadful outcome, whether it is a direct or indirect consequence. By helping others realize how much material is being thrown out instead of being recycled when they could be, this project can make a change....

Student Comments

- The creativity portion of this project taught me that sometimes things may be frustrating or confusing without set guidelines but working together and utilizing your individual strengths and ideas can create a creative project. I also learned that it might take a few failed attempts and dead-end ideas before a possibly functional creation emerges, and that is okay. Creativity can be inspired by many things: other group members, a lecture, or as for me, a random piece of research that I stumbled upon without meaning to. Creativity can produce great ideas by thinking outside of the box and getting inspiration from outside sources.

Student Comments

- I learned a lot about waste management through my research, the film we watched in class, the lifestyle challenge, and all our other classroom lessons. The research and film opened my eyes as to how much I've been contributing to these staggering statistics when it comes to the average waste production and how we still have more work to do when it comes to recycling and composting Improving these aspects, as well as continuing to implement the lifestyle challenges will help me to reduce my waste production and conserve some energy. It will also hopefully encourage me and others to strive to further reduce our environmental impact after seeing how easy some of these relatively large changes can seem.
- Throughout this project, I was able to learn what I could do as an individual to play a role.

Concluding Thoughts

- ✓ Meeting my goal
- ✓ Incorporating 21st Century skills:
 - ✓ Flexible and systemic thinking
 - ✓ Negotiation and collaboration skills
 - ✓ Management and group skills
- ✓ Comparing research paper with group portfolios
- ✓ Future directions

Thank you.



"No single raindrop believes it is responsible for the flood"

Learning to Learn Online: Helping Online Students Navigate Online Learning

Suzanne Withem

University of Nebraska at Omaha

Students spend the first 13 years of their schooling learning how to be good students in the physical classroom, but receive little to no direct instruction in how to be successful online students. By developing a "Learning to Learn Online" module for students new to online learning at UNO, the Office of Digital Learning is helping prepare students to be successful online learners and freeing up faculty to focus on course content rather than instruction in the use of digital tools or study skills. This session will introduce strategies for developing and implementing similar online student-readiness programs to prepare students for success in online courses. The "Learning to Learn Online" resource developed at UNO will serve as a model for illustrating these strategies. Extensive collaboration and consultation with online students and instructors, shows that the 90% of students at UNO who take at least one online class during their course of study need support in order to be prepared for online classes. This session invites faculty to take advantage of the currently available resources and encourages digital learning administrators, advisors, and student support service providers to develop their own school-specific resources.

Beyond Closed Captioning: The Other ADA Accessibility Requirements

Analisa McMillan and Peggy Moore

University of Nebraska Medical Center

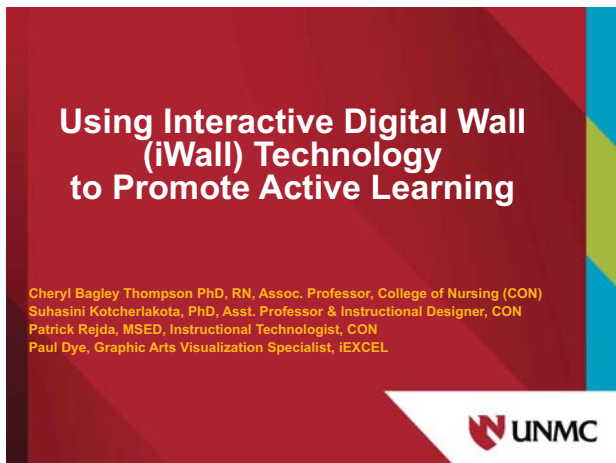
Did you know that there is more to making online courses ADA accessible than just closed captioning videos? Join us as we uncover the ADA accessibility requirements in the Section 508 refresh. In this session, we will discuss how to design online course space, materials and documents to meet compliance standards. Learn the whys and hows to formatting PDFs, PPTs, Canvas content pages, Word documents and multimedia to meet standards as well as considerations for colorblindness.

Using Interactive Digital Wall (iWall) Technology to Promote Active Learning

Cheryl Thompson, Suhasini Kotcherlakota, Patrick Rejda, and Paul Dye

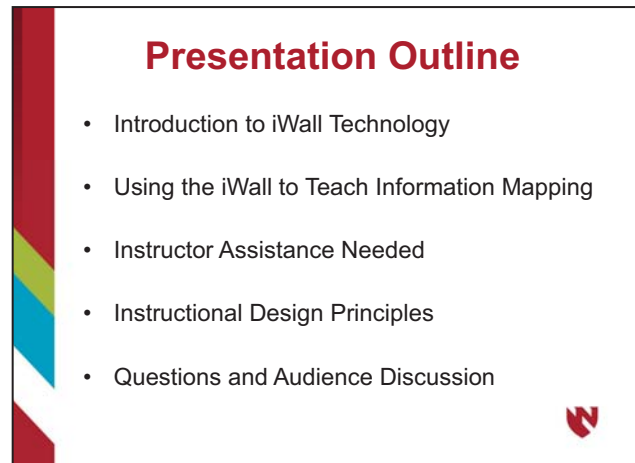

University of Nebraska Medical Center

UNMC's iWall technology bridges College of Nursing campuses across the state. The multi-taction iWall consists of from 9-12 high resolution video panels. These panels provide interactive monitor space on which to project class content and simultaneously allow instructor and student interaction with content. The iWalls across the state are connected, allowing interactions between students in different locations. Students at home or sites without iWall are able to view and participate in class activities via webinar technology. This presentation will discuss the use of iWall within the UNMC iEXCEL Visualization Hub to teach information mapping. Time will be allotted for questions and to discuss attendee proposals for use of such technology.



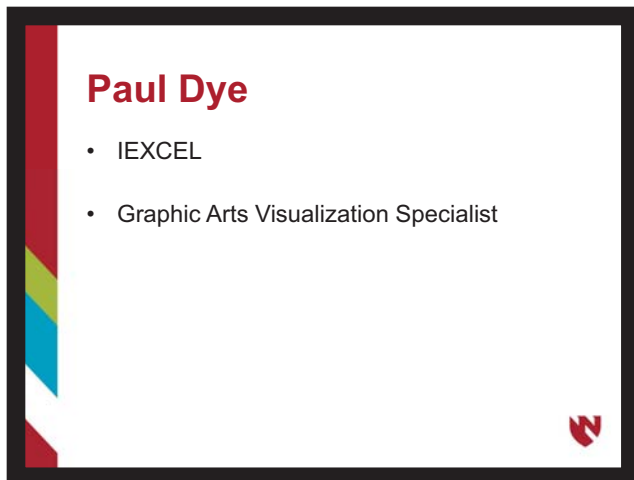

Using Interactive Digital Wall (iWall) Technology to Promote Active Learning

Cheryl Bagley Thompson PhD, RN, Assoc. Professor, College of Nursing (CON)
Suhasini Kotcherlakota, PhD, Asst. Professor & Instructional Designer, CON
Patrick Rejda, MSED, Instructional Technologist, CON
Paul Dye, Graphic Arts Visualization Specialist, iEXCEL




Presentation Outline

- Introduction to iWall Technology
- Using the iWall to Teach Information Mapping
- Instructor Assistance Needed
- Instructional Design Principles
- Questions and Audience Discussion



Paul Dye

- IEXCEL
- Graphic Arts Visualization Specialist



Introduction to the iWall



- Interactive, touch based video wall
- Software
- Features



Introduction to the iWall



- Interactive, touch based video wall
- Software
- Features



How Do I Get Started Using the iWall?



• Key contacts – iWall Managers

Omaha

- Scheduling: Shaunna Briles | shaunna.briles@unmc.edu
- General questions: Paul Dye | paul.dye@unmc.edu

Scottsbluff

- Jerry Schledewitz | jschledewitz@unmc.edu

Kearney

- Alex Schultz | alex.schultz@unmc.edu



Cheryl Thompson

- College of Nursing
- Nurse Informaticist

Using the iWall to Teach Information Mapping

- Health informatics course
- Why used iWall
- Information mapping
- How iWall used
- What worked well
- What did not work so well



Introduction to Health Informatics

- Masters' of Science in Nursing
- Nurse Leader/Executive Advanced Development
- Distance
- Omaha, Lincoln, Kearney, 3 at home



Cybersecurity Threats & Challenges

J. R. Noble

1 University of Nebraska Information Technology Services

2 University of Nebraska–Lincoln

Cyberattacks have brought a paradigm shift in how we secure & protect information. Today, NATO ranks attacks from phishing & malware among their greatest concerns. These attacks are attractive to hackers, who find them to be cheap, hard to track, and even harder to attribute. As budgets rise and fall, awareness of cyber threats and challenges has never been more critical. Theft of intellectual property, loss of research, and attacks on the reputation of the University are among the challenges managed by our team. Join the UNL Information Security team for a talk about today's cyber threats and how they are impacting the University.

Digital Badges: A Focus on Skill Acquisition

Benjamin Malczyk

University of Nebraska at Kearney

Social work faculty designed two social work courses to incorporate badging exercise. The course required students to complete badges in areas such as self-care, utilization of APA citations, uploading videos into Canvas, and other skills necessary for students to succeed. Rather than have class discussion or lecture on this content, students completed a series of exercises outlined in the badge requirements to receive credit in the course.

Students who completed the requirements of a badge actually had to demonstrate the desired skill. As students practiced and demonstrated this skill, they left the course not just knowing about a specific content area such as self-care, but with an ability to actually practice self-care. Additionally, the social work department has considered utilizing badges to ensure student capacity around skills that are not specifically covered in any single course.

Digital Badges: A Focus on Skill Acquisition

Ben Malczyk, MSW, PhD

University of Nebraska Kearney

- Badges provide students with opportunities to learn, practice and ultimately be assessed on demonstration of a skill. Social work faculty designed two social work courses to incorporate badging exercise. The courses required students to complete badges in areas such as self-care, utilization of APA citations, uploading videos into Canvas and other skills necessary for students to succeed. As students practiced and demonstrated this skill, they left the course not just knowing about a specific content area such as self-care, but with an ability to actually practice self-care. Additionally, the social work department has considered utilizing badges to ensure student capacity around skills that are not specifically covered in any single course.
- Choose this presentation because:
 - You are interested in developing badges to enhance your course.
 - You wish to learn how badges can shift the focus from content to skills.
 - You are interested in the benefits of badges to assist students in acquiring necessary skills in a given discipline and document actual mastery of a given skill.

Questions

- What is digital badging?
- Why should I use badges?
- What does badging actually look like?



Sorry.....no badge will be awarded just for attending

What is digital badging?

- "Digital badges are an assessment and credentialing mechanism that is housed and managed online. Badges are designed to make visible and validate learning in both formal and informal settings, and hold the potential to help transform where and how learning is valued."

MacArthur Foundation

https://www.youtube.com/watch?time_continue=3&v=RDmfE0noOJ8

What is digital badging?

- “Digital badges are an assessment and credentialing mechanism that is housed and managed online. Badges are designed to make visible and validate learning in both formal and informal settings, and hold the potential to help transform where and how learning is valued.”

MacArthur Foundation



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MacArthur Foundation



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MacArthur Foundation



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MacArthur Foundation



What is digital badging?

- “Digital badges are an assessment and credentialing mechanism that is housed and managed online. Badges are designed to make visible and validate learning in both formal and informal settings, and **hold the potential** to help transform where and how learning is valued.”

MacArthur Foundation



What is digital badging?

- Potential
 - Micro-credentials- atomizing a class
 - Open-credentials
 - Skills qualifications
 - Gamification

Why should I use badges?

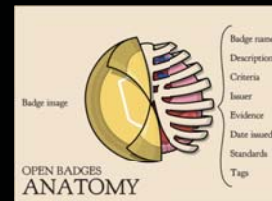
- “Badges can help speed the shift from credentials that simply measure *seat time*, to ones that more accurately measure *competency*. We must accelerate that transition. And, badges can help account for formal and informal learning in a variety of settings.”

• Secretary Arne Duncan
(Italics added)




Why should I use badges?

- “Evidence based stuff”
- Removing assumptions of quality



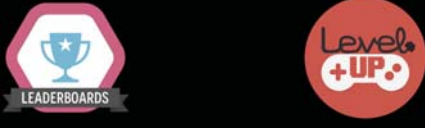
Why should I use badges?

- Shareable



Why should I use badges?

- Gamification and motivation



Why should I use badges?



Why should I use badges?


- Interdisciplinary and soft-skill areas

What does badging actually look like?


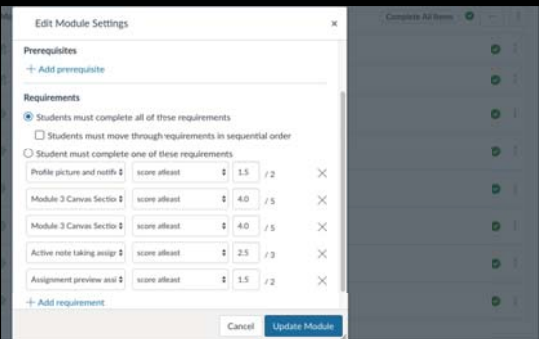
- How can you incorporate principles of badging into an existing course? What would some examples look like?
- How could I get started?
 - Strike one
 - MVB- minimum viable badge

The Self-care Badge

- The badge requirements can be outlined as follows:
 - 1) Reading assignments
 - 2) Self-assessments
 - 3) Worksheets
 - 4) Write up based on assessments
 - 5) Develop a written self-care plan
 - 6) Enact plan over 2 week period
 - 7) Final report.



ONLINE STUDENT ORIENTATION

Prerequisites

Requirements

- Students must complete all of these requirements
- Students must move through requirements in sequential order
- Student must complete one of these requirements

Profile picture and notes	score atleast	1.5	/2	X
Module 3 Canvas Sectio	score atleast	4.0	/5	X
Module 3 Canvas Sectio	score atleast	4.0	/5	X
Active note taking assign	score atleast	2.5	/3	X
Assignment preview assi	score atleast	1.5	/2	X

2018SSQWK49904 - 2018SSQWK87904 Special Studies

badgr


OBJECTIVES PROGRESS LEADERBOARD ANALYTICS

Name	Badge	Evidence	Type
Start Here		*	Complete Module
Module 1: Introduction & Welcome to the Course		*	Complete Module
Module 2: Readiness		*	Complete Module
Module 3: Canvas 101	Canvas 101: Student Badge	*	Complete Module
Module 4: Library	UNK Library Badge	*	Complete Module
Module 5: APA and General Writing	APA Badge	*	Complete Module
Module 6: Miscellaneous & Conclusion		*	Complete Module
Supplemental Material		*	Complete Module

MODULE 3: CANVAS 101	MODULE 4: LIBRARY	MODULE 5: APA AND GENERAL WRITING

badgr

MY BADGES COLLECTIONS ISSUERS



UNK Library Badge

UNK Social Work

Students who earn this badge will successfully complete each of the library research tutorial quizzes. Students will view each content page and complete required quizzes to earn the badge.

Criteria
Students must complete all of the library module requirements.

Tags
V1 JSON V2.0 JSON

Questions?

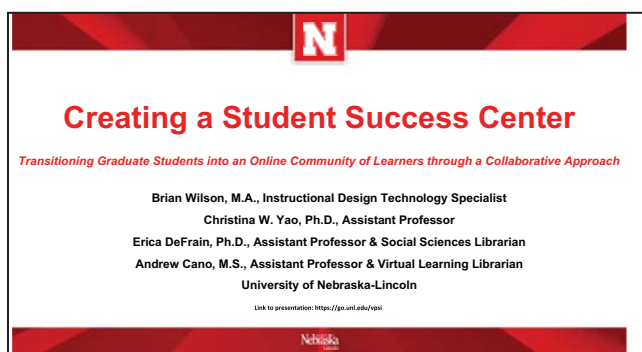
- Contact Ben Malczyk
- malczykbr@unk.edu

Creating a Student Success Center: Transitioning Graduate Students to an Online Community

Brian Wilson, Christina Yao, Erica DeFrain, and Andrew Cano

University of Nebraska–Lincoln

Community building and socialization are key to success in graduate education, particularly as students are facing two new realities at the start of their academic careers: shifting identity into becoming graduate students and scholars, and developing online learning competency. As a way to address these challenges, the EDAD Student Success Center was created in Fall 2016 to increase interactions with faculty and peers as a way to develop a community of learners. This collaborative project included interest and effort from departmental faculty and staff, colleagues from the UNL Libraries, and current graduate students representing the EDAD Graduate Student Association (GSA). As a result, student users described the benefits of the Student Success Center as critical to their success as graduate students. By reducing feelings of isolation, we were able to provide a comprehensive site that helps students feel membership in a learning community and to have access to tools that assist in fostering their educational success. The EDAD Student Success Center was recognized with the 2017 OLC Effective Practice Award. In addition, the presenters have published findings from this collaboration in the May 22, 2017 edition of the EDUCAUSE Review.



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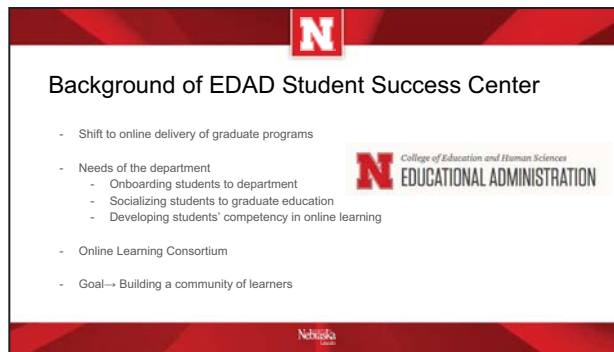
Creating a Student Success Center

Transitioning Graduate Students into an Online Community of Learners through a Collaborative Approach

Brian Wilson, M.A., Instructional Design Technology Specialist
Christina W. Yao, Ph.D., Assistant Professor
Erica DeFrain, Ph.D., Assistant Professor & Social Sciences Librarian
Andrew Cano, M.S., Assistant Professor & Virtual Learning Librarian
University of Nebraska-Lincoln

Link to presentation: <https://go.unl.edu/yvsi>

Nebraska



N

Background of EDAD Student Success Center

- Shift to online delivery of graduate programs
- Needs of the department
 - Onboarding students to department
 - Socializing students to graduate education
 - Developing students' competency in online learning
- Online Learning Consortium
- Goal→ Building a community of learners

N College of Education and Human Sciences
EDUCATIONAL ADMINISTRATION

Nebraska

Collaboration and Partnerships


key to program's success, and strengthens relationships

1. EDAD departmental faculty and staff 
2. Instructional Designer 
3. University Libraries  
4. EDAD graduate students (GSA)  

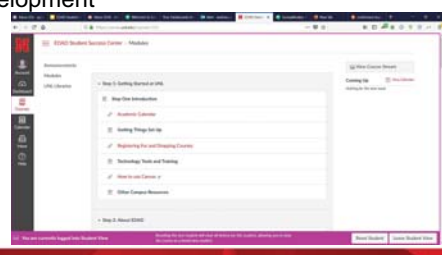



Goals

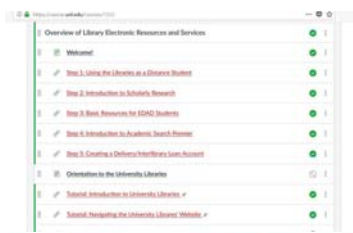

1. Convey program information
2. The demands/expectations of graduate education
3. The demands/expectations of online education
4. Getting to know the department



Development

Libraries' Tutorials

Faculty/Staff Videos





Assessment - Preliminary Survey

Respondents (n=30)

- Majority of respondents at least somewhat agreed that the information was useful
- A range of 50-53.27 percent of respondents selecting somewhat agree, agree, or strongly agree for assessing various library content areas
- 58.6 percent strongly agreed or agreed that the site was easy to navigate
- 55.17-55.17 percent somewhat agreed, agreed, or strongly agreed that the information increased their knowledge and familiarity with the noted aspects of the department.

Qualitative feedback (n=10)

- Most helpful areas: library resources (6), faculty videos (5), programmatic and institutional information (3), and writing resources (2).




Assessment - Qualitative Feedback

"I found the EDAD Student Success Center to be essential in my first weeks of the program. Having just been accepted, I felt a little lost, and a little uncertain. The EDAD Student Success Center gave me the tools to navigate the program, as well as continuing support."



—Adam Fullerton, PhD Student in Educational Leadership and Higher Education

"Thank you for the [library] tutorial! This is my fourth semester as a graduate student, so I only wish I had experienced this earlier in my academic career here. I enjoyed the simplicity and intuitive nature of the presentation. Great job!"

—Anonymous Student



Assessment - Library Tutorial Use Stats

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I thought this was great! I liked the "guide on the side" and interactive features. One hiccup - I didn't realize I needed to submit answers until the end, and when I did the tutorial again to add the answers I didn't get a certificate that indicated I answered them.

This tutorial was AWESOME! It was just informative enough to allow us to go in and explore the most useful resources. Thank you so much!

really helpful refresher! glad to know I can refer back at any time as it is a link in my course content. learned that you can scan/deliver materials that are only available in print - something I was not aware of. Thanks

I found this tutorial incredibly informative. While I'm a bit overwhelmed by the amount of resources, I'm grateful to have Ms. DeFrain as an expert to reach out to!

Very helpful! Included information that I wasn't aware of, and will be valuable to me as both a student and staff member.

I felt this was very helpful and I enjoyed the interactive nature!

Feedback

What did you think of this tutorial?

This was extremely helpful! Thank you for the time you spent creating this.

Nebaska

N

Impact

- Impact on Instructional Design
- Impact on Libraries
- Impact on faculty and course work
- Media and publications

Nebaska

N

Why IT Matters to Higher Education

EDUCAUSEreview

Helping Graduate Students Join an Online Learning Community

By Dr. Brian Wilson, Christa Yao, and Erica DeFrain | May 2017

Key Takeaways:

- Online courses in graduate education have the potential to be one of the most effective ways to address the higher education access and completion challenges that are currently facing higher education.
- The success of graduate online learning experiences is largely dependent on the quality of the online learning experience.
- Strong support systems of faculty and staff are essential to the success of graduate online learning experiences.
- Strong relationships with faculty and staff are essential to the success of graduate online learning experiences.

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INSIDE HIGHER ED

Trial and Error: Teaching Learners to be Online Students

Nebaska

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Nebaska

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Future Directions

- Challenges that we faced and how we will address them
- Synchronous sessions

Nebaska

N

Questions?

Brian C. Wilson, MA - bwilson7@unl.edu
 Christina W. Yao, PhD - cyao@unl.edu
 Erica DeFrain, PhD - edefrain2@unl.edu
 Andrew Cano, MS - andrew.cano@unl.edu

Nebaska

Male Allies: Supporting an Inclusive Environment in ITS

Heath Tuttle^{1,2} and Wes Juranek¹

1 University of Nebraska Information Technology Services

2 University of Nebraska–Lincoln

Greater demands and limited resources mean that innovation is essential for Information Technology Systems (ITS) at the University of Nebraska. A key element of a successful and innovative organization is a culture that values and respects diversity. Diverse teams, in turn, lead to improved performance and a more effective organization (Hutchings & De Cieri, 2016).

In this interactive session, presenters will discuss the role male allies have in creating an inclusive culture, discuss every-day actions that everyone can take to improve the work environment, and promote the development of a Male Ally group within ITS and how participants can stay involved.

Importance: Why diversity and inclusivity are important for the success of ITS • Awareness of the types of issues that inhibit diversity and inclusiveness • Actions male allies can take to promote an inclusive working environment • How to stay engaged through a Male Allies group



DIVERSITY BY THE NUMBERS

- ▶ Women comprise 57% of US professional occupations
- ▶ Women hold 26% of US computing-related jobs (36% in 1991)
- ▶ Women make up 18% of US Software Developers
- ▶ Women make up 13% of US Computer Hardware Engineers
- ▶ Women make up 12% of US Computer Network Architects

ncwit.org (2018)

Diversity and inclusion is key to the success of IT organizations

- ▶ Why Male Allies
 - ▶ Diversity and inclusion should involve everyone.
 - ▶ (White) men are often the leaders and gatekeepers in the computing workplace.
 - ▶ Women report that support to pursue and persist in STEM careers often comes from men
- ▶ "Groups with greater diversity solve complex problems better and faster than homogenous groups"

ncwit.org

Diversity and inclusion is key to the success of IT organizations

- ▶ COLLECTIVE INTELLIGENCE RISES IN GROUPS THAT INCLUDE WOMEN
- ▶ GENDER BALANCED TEAMS OUTPERFORM MALE-DOMINATED AND FEMALE DOMINATED TEAMS
- ▶ ORGANIZATIONS WITH 3+ WOMEN ON EXECUTIVE BOARDS OUTPERFORM THOSE WITHOUT

Improving diversity and inclusion

- ▶ Recruiting and Hiring
 - ▶ Job descriptions
 - ▶ Diverse pool
- ▶ The Work Environment
 - ▶ Eliminating micro aggression
 - ▶ Eliminating mansplaining
 - ▶ Giving credit to women
 - ▶ Identifying opportunities
- ▶ Off boarding
 - ▶ Exit interviews

What can an Ally do?

- ▶ Listen to women's stories
- ▶ Talk to other men
- ▶ Recruit women
- ▶ Increase female leader visibility
- ▶ Mentor and sponsor women
- ▶ Notice and correct bias
- ▶ Establish accountability metrics
- ▶ Model alternative work-life strategies
- ▶ Make discussions of gender less "risky"
- ▶ Work with women's groups

Develop a plan to stay engaged

- ▶ Self awareness
- ▶ Talk to women and ask for feedback
- ▶ Get involved with women's groups
- ▶ Get involved with Male Allies at the University of Nebraska

Q&A

- ▶ Wes Juranek – wjuranek@nebraska.edu
- ▶ Heath Tuttle – htuttle@nebraska.edu

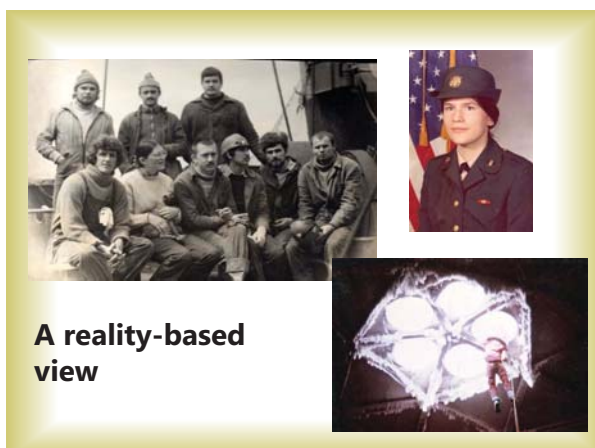
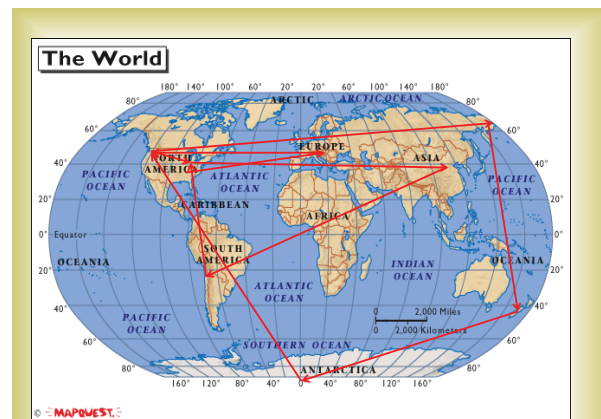
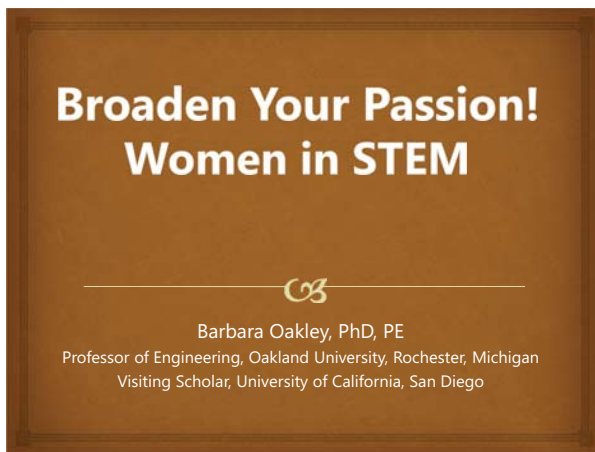
Featured Extended Presentation

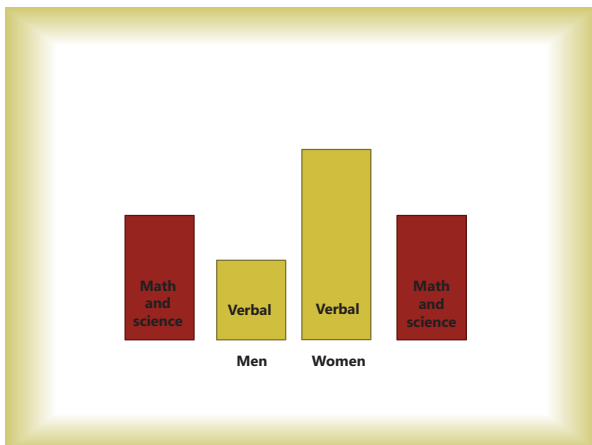
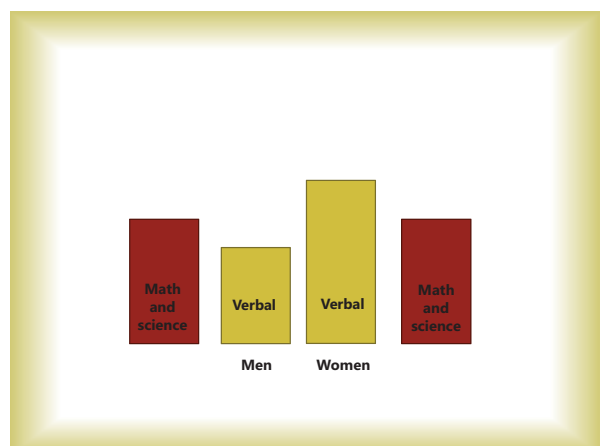
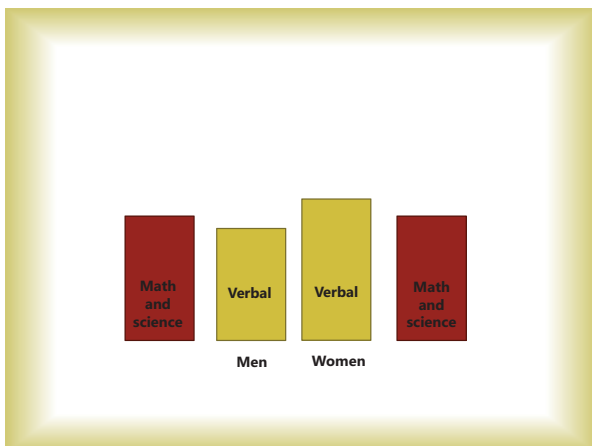
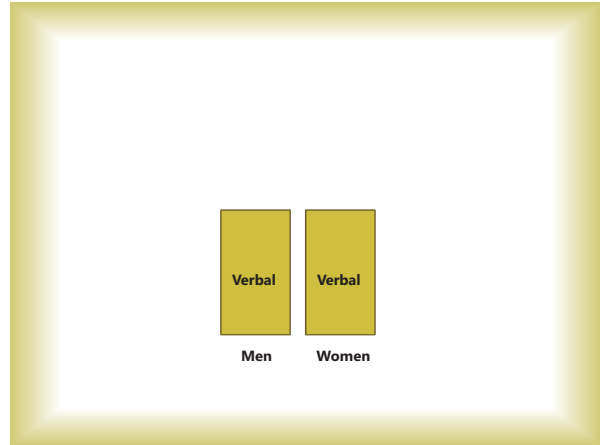
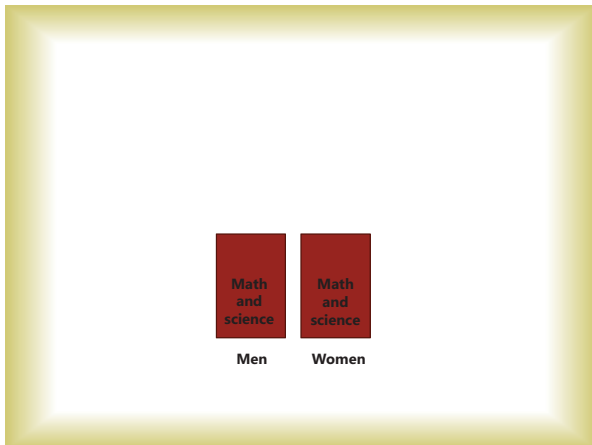
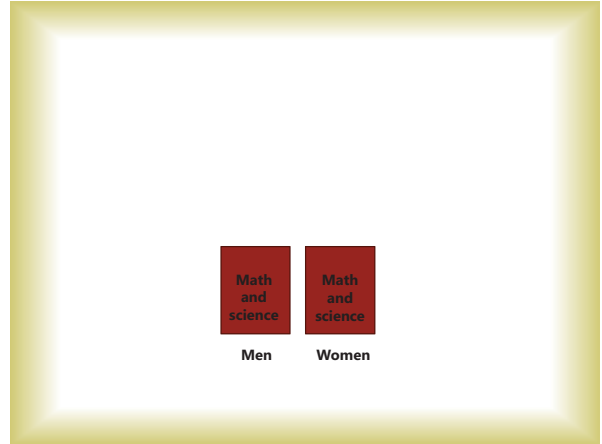
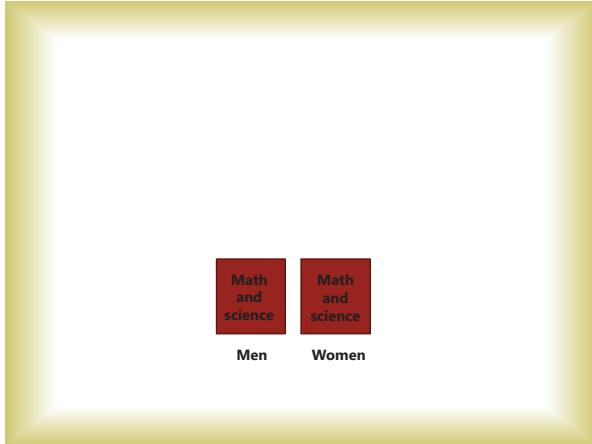
Broaden Your Passion! Encouraging Women in STEM

Barbara Oakley

Oakland University in Rochester, Michigan

Women and men develop with equal, often outstanding, abilities in math and science. However, one of women's advantages is that they also often have a developmental edge over men when it comes to verbal abilities. The result? When women hear the ubiquitous advice to "follow their passions," they sometimes turn towards their undeniable strengths outside STEM. Some subjects—like STEM—take longer for women and men to master. This talk helps women recognize that it's sometimes important to be patient with passion—*don't just follow your passions, broaden them!*





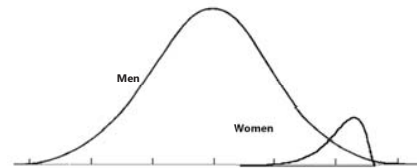
So, follow your passions?

NOT SO FAST

**Don't just follow your passions.
Broaden your passions!**

My own observations of differences between genders

- **Men: Cockiness**
- **Women: Balanced willingness to second guess themselves**



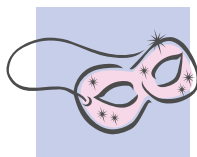
Gender differences in my
engineering classroom

Career choices:

- Be “great” in a degree program that’s easy for you
 - with low paying career options
- Be “average” in a degree program that demands more of you
 - with high paying career options



Caroline Mitchell



**The imposter
syndrome**

Pair and share

- **Have you ever experienced the Imposter Syndrome?**



Trail drive of the 1800s

The world is changing



The world is changing

- STEM jobs are growing at 1.7 times the rate of non-STEM jobs
- The U.S. is not producing enough candidates to fill those jobs.
- Only 16% of high school seniors are interested in pursuing STEM careers.

Careers

- 74% of college graduates with STEM degrees are going into non-STEM jobs
 - Healthcare
 - Law
 - Education
 - Social Work
- Graduates are highly sought after and earn higher wages than their non-STEM counterparts
- Just because you may have to study more in STEM doesn't mean your career will be that way.

All STEM jobs are NOT created equal

- Nutritional Science majors (86.4% female) earn \$35,000 out of college.
- Mining and Mineral Engineering majors (90% male) earn \$75,000 out of college.

- "Having a technical degree is the best foundation to give you the most choice in this economy."

- Anthony P. Carnevale, director of Georgetown's Center on Education and the Workforce.



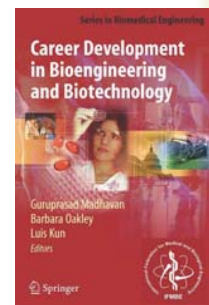
Amazon's Jeff Bezos

Why is STEM harder?



Stop the "air guitar"!

Lack of STEM knowledge in vital fields



Using common sense

- Everybody doesn't need to be an scientist, engineer, or mathematician.
- Everyone *should* have a basic mathematical competency and rudimentary scientific literacy.

Numerical ability predicts mortgage default

Kristopher Gerard¹, Lorenz Goette^{2,3}, and Stephan Meier³

¹Research Department, Federal Reserve Bank of Atlanta, Atlanta, GA 30303; ²Department of Economics, Faculty of Business and Economics, University of Lausanne, 1015 Lausanne, Switzerland; and ³Graduate School of Business, Columbia University, New York, NY 10027

Edited by Jose A. Schekelman, Princeton University, Princeton, NJ, and approved May 26, 2013 (received for review November 26, 2012)

Unprecedented levels of US subprime mortgage defaults precipitated a severe global financial crisis in late 2008, plunging much of the industrialized world into a deep recession. However, the fundamental reasons for why US mortgages defaulted at such spectacular rates remain largely unknown. This paper presents empirical evidence showing that the ability to perform basic mathematical calculations is negatively associated with the propensity to default on one's mortgage. We measure several aspects of financial literacy and cognitive ability in a survey of subprime mortgage borrowers who took out loans in 2006 and 2007, and match these to objective, detailed administrative data on mortgage characteristics and payment histories. The relationship between numerical ability and mortgage default is robust to controlling for a broad set of sociodemographic variables, and is not driven by other aspects of cognitive ability. We find no support for the hypothesis that numerical ability impacts mortgage outcomes through the choice of the mortgage contract. Rather, our results suggest that individuals with limited numerical ability default on their mortgage due to behavior unrelated to the initial choice of their mortgage.

subprime mortgage borrowers to administrative records that contain detailed information on their mortgage payment behavior (see Materials and Methods and SI Appendix for details). Limited cognitive and numerical abilities may impact the default risk of a mortgage borrower for several different reasons. First, limited cognitive abilities could impact an individual's choice of mortgage contract. Several studies have shown that better cognitive abilities are associated with improved ability to "think ahead" in a variety of decision-making problems (12, 13). Thus, individuals with better cognitive abilities may be better able to anticipate future contingencies and choose a mortgage with payment streams that better accommodate these contingencies. Indeed, optimal mortgage choice turns out to be a very complicated problem with often surprising implications (14). Furthermore, individuals are often confused about even basic mortgage terms (15). Higher cognitive abilities and financial literacy have also been shown to result in better bargaining outcomes (16) and to a lower likelihood of being susceptible to questionable practices (17). Thus, individuals with higher cognitive abilities may be more agile in negotiating with mortgage lenders to obtain better contract terms, such as lower interest rates and the absence of prepayment penalties. Similarly, individuals with lower cognitive abilities may be more susceptible to

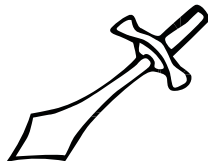
foreclosure | consumer finance | subprime loans | limited rationality

The Law of Serendipity

Lady Luck favors the one who tries.



Passion



See also:

- **Stoet, G, and DC Geary.** "Sex differences in academic achievement are not related to political, economic, or social equality." *Intelligence* **48** (2015): 137-151.

- Be wary of looking to make yourself into a victim—you can scare off the very people you most want to work with.

Two kinds of "supporters"

Students as Creative Forces to Enhance Curriculum via E-Learning

Betsy Becker, Peggy Moore, and Dele Davies

University of Nebraska Medical Center

Academic institutions are seeking to enhance student centered teaching with active educational encounters, but development can be hampered by limited time and resources. This session focuses on the successful engagement of student-faculty teams to create interactive e-learning modules to enhance our medical school and other health science programs curricula.

UNMC launched the “UNMC Student E-Learning Program” for student and faculty teams to build interactive e-learning modules. We started with a competitive application process, informational meetings, and a comprehensive website with resources to guide development. Then student developers, with their faculty advisors, utilized our E-Learning Studio to access tools and e-learning instructional design consultation over six months. The UNMC E-Learning Scorecard and Development Checklist guided developers in best practices in instructional design and method of education. The completed e-modules were demonstrated at a campus wide E-Learning Showcase and accessed from the online UNMC E-Gallery.

Through this program, 84 students in medical and health professions created 39 e-learning projects. Of these, 57 (67.9%) students responded to our survey about their experience as curriculum developers and we analyzed the results. In this session, learn what student e-learning developers said about their motivations and benefits from participation in this unique program in higher education.

Learning Outcomes: Participants will discuss the how student and faculty teams at UNMC develop interactive e-learning curriculum • Participants will Identify the motivating factors and benefits for students to participate in curriculum development

Key Points: Key elements of the UNMC E-Learning Student Program • Top motivations and benefits of student developers reported in the study • The value of students developing interactive modules.

Rethinking Visual Communication Curriculum: The Success of Emporium Style


Adam Wagler, Katie Krcmarik, and Alan Eno

University of Nebraska–Lincoln

The College of Journalism and Mass Communications faced challenges with budget and faculty resources causing a bottleneck, in the beginning, visual communications courses for the College. In the fall of 2016, a solution was implemented in the form of an emporium style teaching model, where students can seek help on projects and collaborate with peers on projects. The program is the first-of-its-kind giving students experience with the technologies and techniques needed to be powerful and effective storytellers. Students leverage the technology they use in their daily lives to solve real-world problems, with the help of faculty available in a learning resource center. Topic-based workshops and boot camps offer students additional hands-on learning experiences with the software. The program's first students finished in Spring 2017 with positive results to date. Participants will take away ideas, materials, lessons around organizing, teaching, and assessing a course of this nature.

1. Learn the process of implementing an emporium style model for a visual communications program UNL's College of Journalism and Mass Communications.
2. Discuss the planning, scope, process, challenges, and instructional design strategies used to develop the series of visual communications courses.
3. Access examples of online modules, learning materials, rubrics, and other documentation used this year.
4. View student projects that demonstrate learning from online modules that make up an agile curriculum that stays nimble based on relevant trends in media.
5. Overview of assessment plan and results from Fall 2017 and Spring 2018.

Rethinking Visual Communication Curriculum:
The Success of Emporium Style

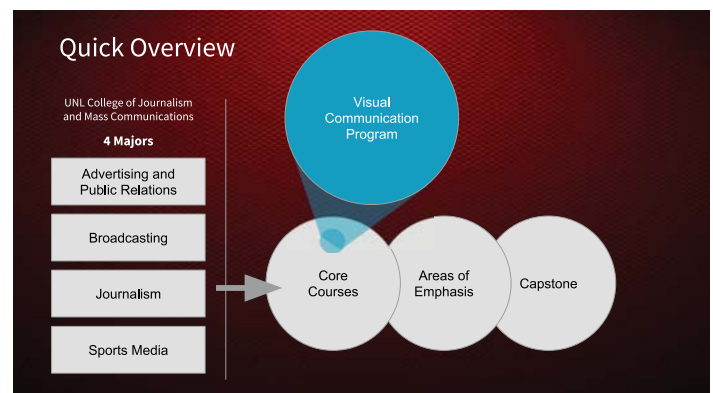


University of Nebraska-Lincoln
College of Journalism and Mass Communications

Adam Wagler, Ph.D.
@adamwagler | adamwagler@unl.edu

Katie Krcmarik
kkrcmarik2@unl.edu

Alan Eno
alaneno@unl.edu



“When you struggle with a problem that is when you understand it and you will never forget it.”

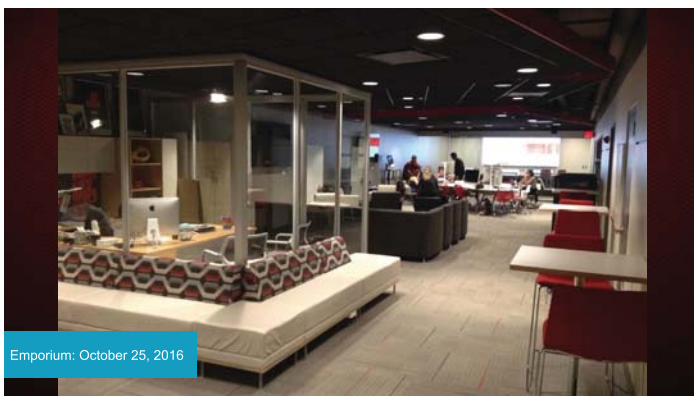
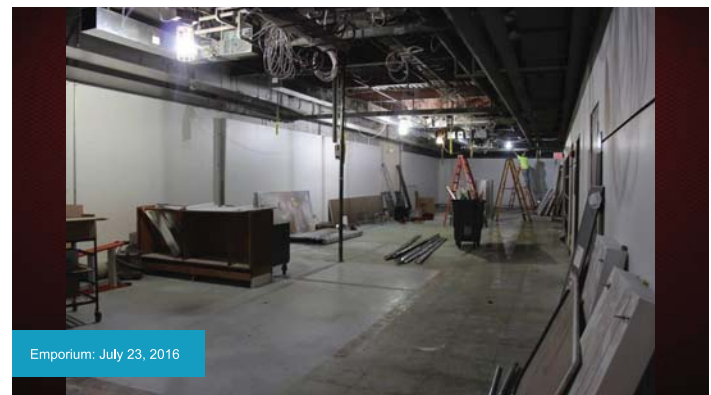
Elon Musk (2013)
<http://www.businessinsider.com/elon-musk-job-interview-rule-2013-12>

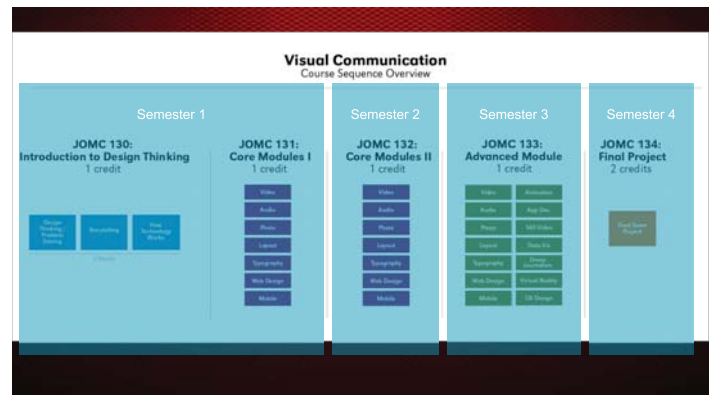
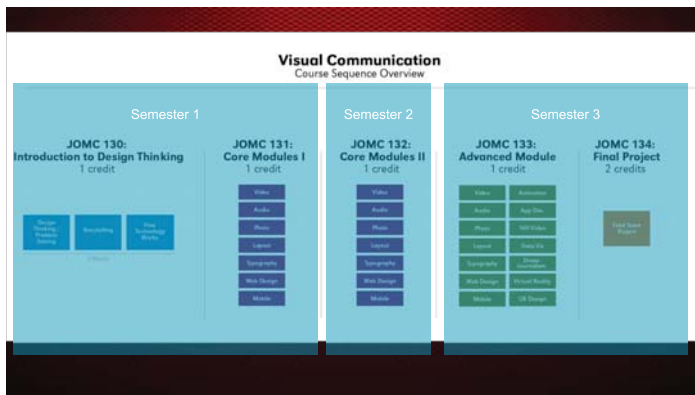
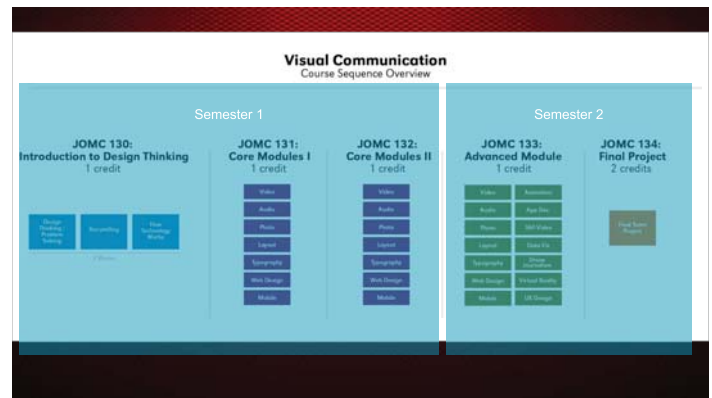
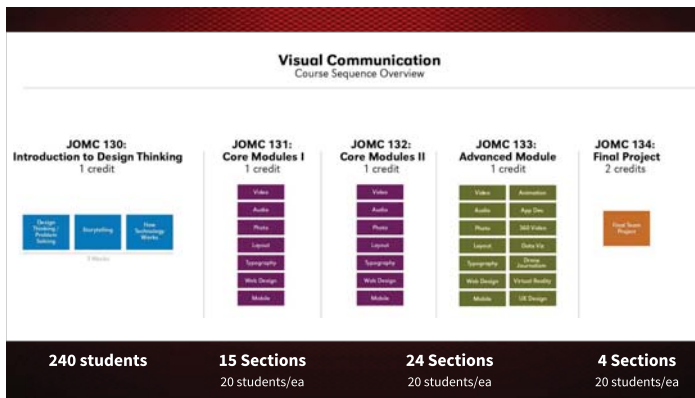
Course Objectives

Think **Storytelling** **Technology** **Media**

- ### Internal Course Objectives
- Resource for students**
throughout their major
 - Flexible curriculum**
up-to-date for faculty and students to stay current with rapid change
 - Focus on process**
require students to be resourceful to reach goals
 - Set the tone**
rigor, culture, and expectations for the college
 - Content is more than just production**
strategy, planning, audience, placement, format, medium, etc.

- ### How to Get There
- 1. Emporium Style Course**
 - Replaces lectures with a learning resource center model
 - Usually features interactive computer software and on-demand personalized assistance
 - Help when you need it.
 - 2. Challenge Based Learning (CBL)**
 - Encourages learners to leverage the technology they use in their daily lives to solve real-world problems
 - Collaborative and hands-on: students to work with peers, teachers, and experts in their communities and around the world
 - Ask good questions, develop deep subject area knowledge, identify/solve challenges, take action, and share their experience.
 - Scalable model with a flexible framework for learning with multiple entry points
 - Places students in charge of their learning
 - Promotes the authentic use of technology
 - Develops 21st century skills
 - Encourages deep reflection on teaching and learning





Lessons Learned Year One

- Students want more structure
 - More deadlines - three instead of one
 - More prescribed path through modules
- Faculty workload needs reduction
 - Not allow all work to be submitted at end of semester
 - Reduce grading further
 - Management of student progress
- More equitable amount work between modules

JOMC 131, 132, 133: Levels by Major

Core	ADPR	BRDC	JOUR
Video			
Photography			
Layout			
Typography			
Web Design			
Audio			
Mobile/Social			
Exploratory	x 6	x 6	x 6
Total	x 18	x 18	x 18

JOMC 131 Requirements by Major

ADPR	BRDC/SPMC	JOUR
Typography 1	Typography 1	Typography 1
Layout 1	Layout 1	Layout 1
Layout 2	Web 1	Web 1
Web 1	Photo 1	Web 2
Web 2	Photo 2	Mobile 1
Mobile 1	Mobile 1	Mobile 2

Note: Fashion Communication Majors should follow the ADPR track

JOMC 132 Requirements by Major

ADPR	BRDC/SPMC	JOUR
Audio 1	Audio 1	Audio 1
Photo 1	Audio 2	Photo 1
Photo 2	Audio 3	Photo 2
Video 1	Video 1	Video 1
Video 2	Video 2	Video 2
Mobile 2	Video 3	Mobile 3

Note: Fashion Communication Majors should follow the ADPR track

Lessons Learned Year One

- Change wording
 - Stars to Levels
 - Advanced to Exploratory
- Reduce teaching themselves perception
 - Add introductory screencasts by faculty
 - Need to better enforce using the lab
 - Add workshops to better support learning
 - Utilize JOMC 130 course to help solve

JOMC 130



1. Design Thinking / Problem Solving
2. Storytelling
3. How Digital Technology Works

Lessons Learned Year Two

- Extend JOMC 130 to full 8 weeks
 - Better address issues experienced by bulk of students
 - Dive into some of the technology/assignments
 - Answer questions to full group
 - Reinforce what is happening in the modules

Lessons Learned Year Two

- Run accelerated 8 week sessions
 - Run another set in Fall
 - Roll out more for Spring
- First Graduate Assistants to teach in the program
- Management is still a challenge
 - Spreadsheets to make tracking easier
 - Developing a custom online textbook to eliminate most management challenges
 - Explore other ways to streamline the process

Lessons Learned Year Two

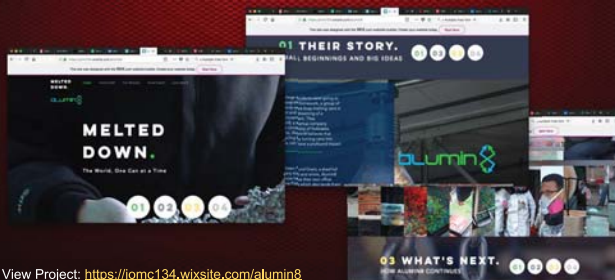
- More workshops
- More instructor support/training
- Course wide policies and deadlines
- JOMC 134 - first full scale sections
 - Needed more deadlines for content and to correct problems sooner
 - Students love teams assembled using CATME
 - Students seeing the purpose of the courses

Examples of Projects



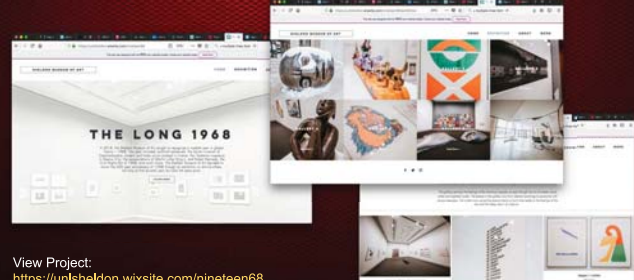
View Project: <https://madelinemohatt5.wixsite.com/bigredbites>

Examples of Projects



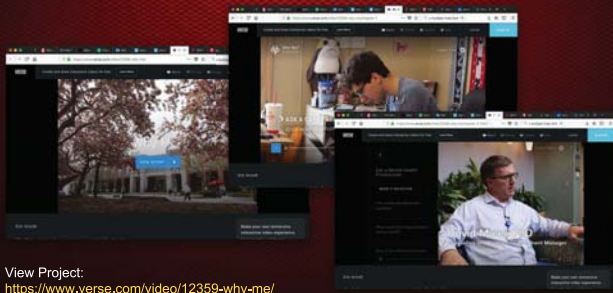
View Project: <https://jomc134.wixsite.com/alumin8>

Examples of Projects



View Project: <https://unsheldon.wixsite.com/nineteen68>

Examples of Projects

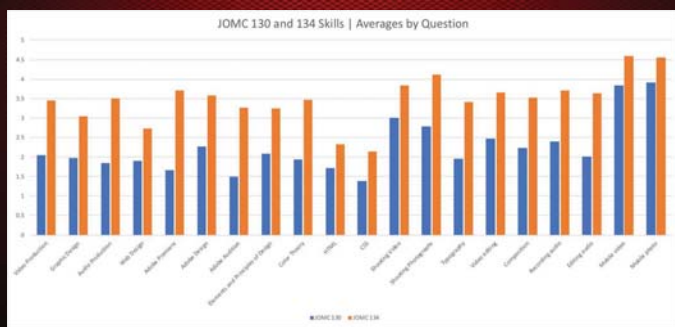


View Project: <https://www.verse.com/video/12359-why-me/>

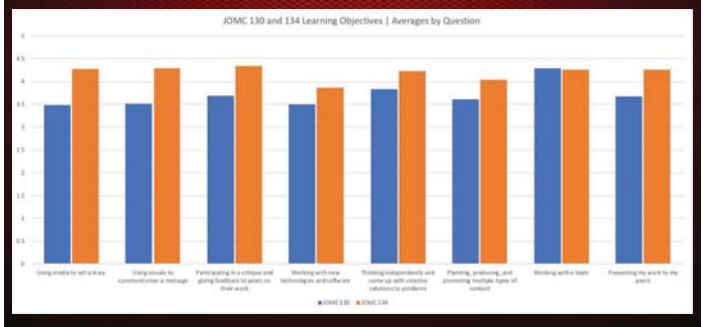
Assessment

- Canvas Outcomes in rubrics
- Grade distributions
- Course Evaluations
- Instructor Task Force
- Pre and post program level survey (JOMC 130 / JOMC 134)
- Case study of the lab

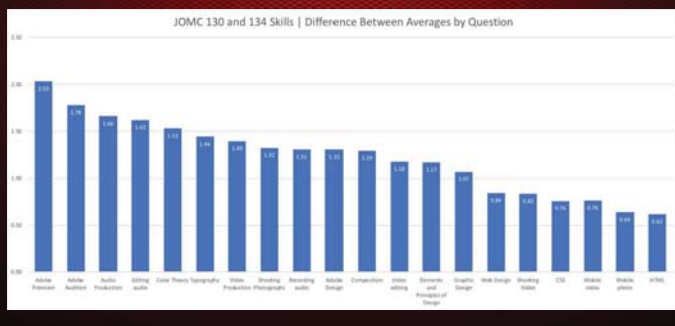
Assessment



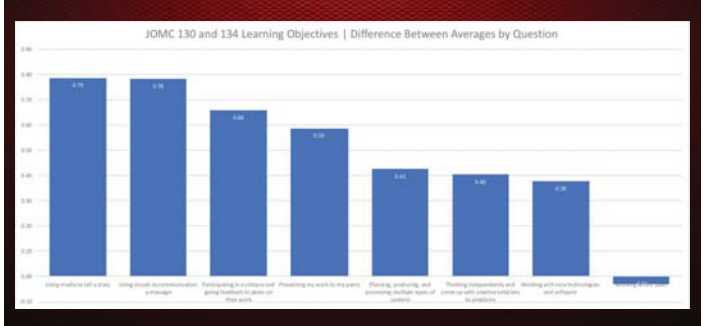
Assessment



Assessment



Assessment

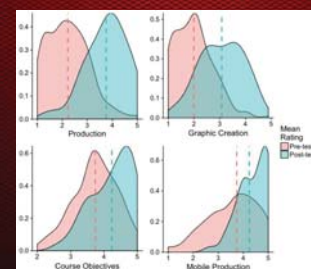


Assessment

Skills **1.23** ↑
 Learning Objectives **0.50** ↑

* Average difference between pre/post

Assessment



Wagler, A. & Berke, C. (2018). Rebuilding from the Ground Up: Developing a New Approach to Visual Communications Curriculum.

Awesome by-products from the new program

- First time grad students have taught in our college
- The lab has become a resource for students and college
- Research is being spun up
- Book developed for others to use and fund program
- JOMC 134 projects exceed original expectations

Moving Forward: the Practical

- Deploying the custom textbook in the Fall
- Make changes to modules as needed
- Add more instructional screencasts
- Have a more frequent workshop schedule
- Broader faculty participation in aspects of the course
- Find additional ways to increase value of lab

Moving Forward: the Theoretical

- Develop an assessment plan that includes outside evaluation of work
- Continue with student reported learning assessments
- Start to look for trends and long term impact for the college



Thank you and Questions



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A Course Delivery Evolution: Moving from Lecture to Online to a Flipped Classroom

Kim Michael and Tanya Custer

University of Nebraska Medical Center

This presentation will focus on the findings of a research study designed to evaluate different modes of course delivery in a Genitourinary Sonography course. The purpose of the study was two-fold, first to determine if the mode of delivery (traditional, on-line, flipped) affects student satisfaction in a genitourinary sonography course and second to evaluate overall course outcomes.

The study reviewed current data over a 9-year period from a single sonography course offered in the spring semester of a 12-month Bachelor of Science health professions program. During the first three years (2010-2012), the course was offered in a traditional, lecture style format. From 2013-2015, the course switched to a totally on-line format and then from 2016-2018 a flipped classroom format was utilized. Data was compiled and compared between the three styles using course evaluations and student outcomes. Assessment of student perceptions and outcomes noted mixed results in regard to the different modes of delivery utilized.

At the conclusion of the presentation, attendees will be able to:

1. Describe three different modes of delivery (traditional, on-line, flipped) used as part of a research study in a genitourinary sonography course.
2. Summarize data gathered on student perceptions in regard to the use of three different modes of delivery (traditional, on-line, flipped) in a genitourinary sonography course.
3. Summarize data gathered on lessons learned and student learning outcomes for three different modes of delivery (traditional, on-line, flipped) in a genitourinary sonography course.

Enhancing the Quality of Online Teaching via Collaborative Course Development

B. Jean Mandernach and Steve McGahan

University of Nebraska at Kearney

Collaborative course development offers a host of opportunities for academic departments to ensure consistency, maximize resource allocation, and increase scalability of online course offerings. By utilizing a collective design model, a team of content experts (i.e., department faculty), curriculum specialists, instructional designers, and instructional technologists can collaborate to develop dynamic online courses that can be taught by multiple instructors over successive terms. The key to a successful collaborative course design lies in an increased up-front investment of time and resources to ensure a well-designed course that aligns learning objectives, instructional content, activities, and assessments in a manner that is uniquely suited to the pedagogical opportunities inherent in the online environment. But despite the benefits of collaborative course design, it must be integrated in a manner that aligns with the unique context, needs, and resources of each individual department and institution to be effective.

Presentation will

- 1) explore various models for collaborative online course development,
- 2) discuss return-on-investment for collaborative course design, and
- 3) examine the role of collaborative course development to promote academic quality and instructional effectiveness in large or growing programs.

Participants will:

- 1) identify various models for collaborative online course development
- 2) outline benefits of collaborative course design
- 3) explore strategies for enhancing student learning via collaborative course development



61 hours per week

Ziker, J. (2014). The long, lonely job of homo academicus, *The Blue Review*. <https://theblureview.org/faculty-time-allocation/>

12% + 12% + 11% = 35%

Instruction Class Preparation Course Administration & Grading **TEACHING**

A little math...

21.35 hours per week

3 courses 4 courses

7.12 hours per course per week 5.34 hours per course per week

...and more math...

7.12 hours

5.34 hours

6.23 hours per class per week for campus faculty

Online Teaching

Adjunct Fulltime

13.33 hours 11.05 hours

per course per week

Online Course Development

Over 100 hours

Freeman, L. A. (2015). Instructor time requirements to develop and teach online courses. *Online Journal of Distance Learning Administration*, 18(1). Retrieved from <https://www.westga.edu/~distance/ojdl/spring81/cavanaugh81.htm> <http://www.westga.edu/~distance/ojdl/spring181/freeman181.html>

Course Development Models

Individual Structured Collaborative Standardized

Individual

- Faculty autonomy to determine content, structure, appearance and format

Structured

- Faculty autonomy to determine content; templates and guidelines to inform structure, appearance and format

Collaborative

- Faculty autonomy to drive decision-making; input and guidance from instructional designers and instructional technologists

Standardized

- Collective course design by content expert, curriculum specialist, instructional designer, instructional technologist and relevant professionals

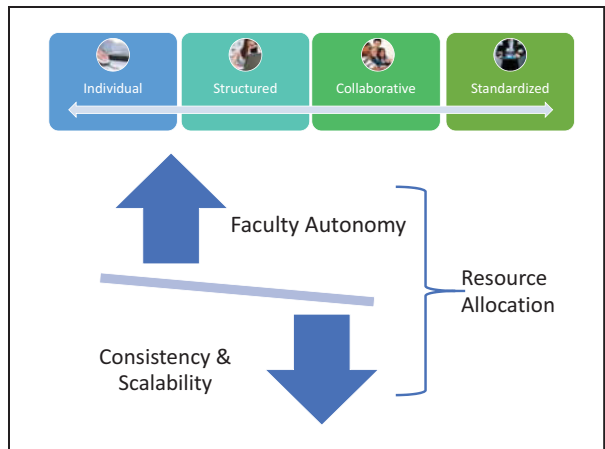
POLL

What online course design model are you currently using?

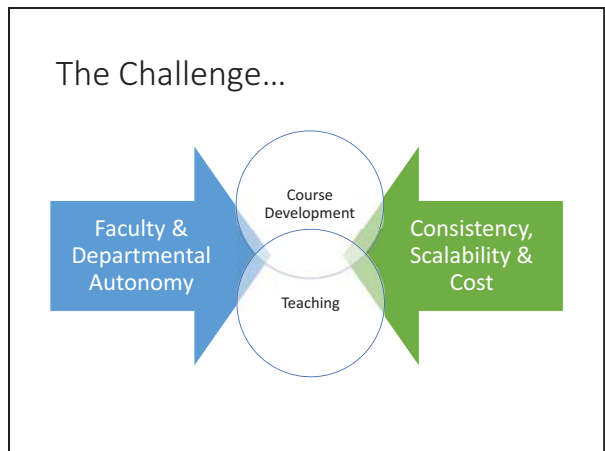
- Indicate where your department or program lies on the continuum.

Individual Structured Collaborative Standardized

1 2 3 4 5 6 7



Resources allocated to faculty	↔	Resources allocated to courses
Governance in departments	↔	Governance in centralized online learning department
Course development autonomous process	↔	Course development a standardized process
Combined roles for course development and instruction	↔	Separated roles for course development and instruction
Course revision process flexible	↔	Course revision process fixed



KEY CONSIDERATIONS

- Stakeholders
- Course Administration
- Pedagogy
- Technology

- Stakeholders
- Faculty
 - Administrators
 - Instructional Designers
 - Instructional Technologists
 - Accreditors
 - Students

Course Administration

- Program alignment
- Scheduling
- Programmatic or department objectives
- Pre-requisites
- Post-requisites





INSTITUTIONAL CONTEXT

- Size of online program
- Goals of online program
- Organizational structure
- Funding and resources
- Staffing
- Faculty governance
- Accreditation

Considerations...

- Funding**
 - Policies for funding initial course development and ongoing maintenance
 - Interaction between funding and policy
- Faculty governance**
 - Interaction between course development processes and faculty governance bodies (Senate, Union, Bargaining Unit, etc)
 - Role of academic freedom
- Organizational structure**
 - Oversight for guidelines, review and approval of online courses
- Policy**
 - Expectations and guidelines for standards, teaching, updates, etc.
 - Role of intellectual property

Levels of Collaboration

Context 1: Single Course / Single Instructor / Stable

Collaboration with instructional design team

- Increased autonomy
- Flexibility in design
- Course quality
- Course compliance

Context 2: Single Course / Multiple Instructors / Stable

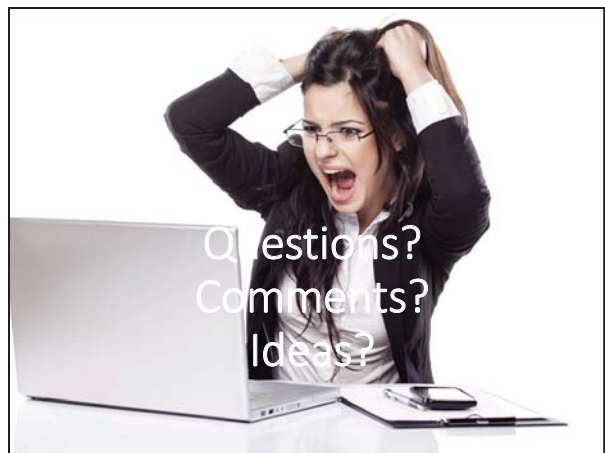
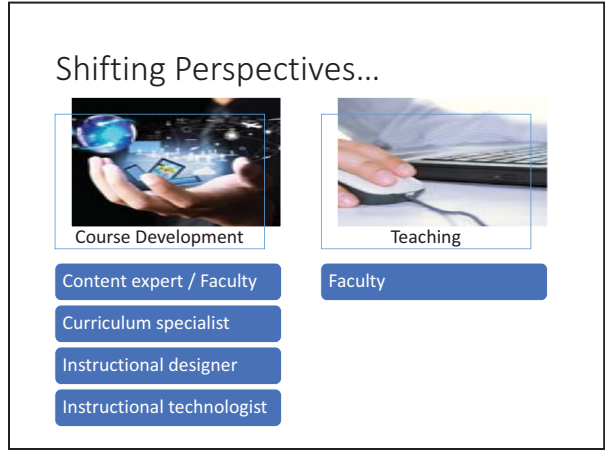
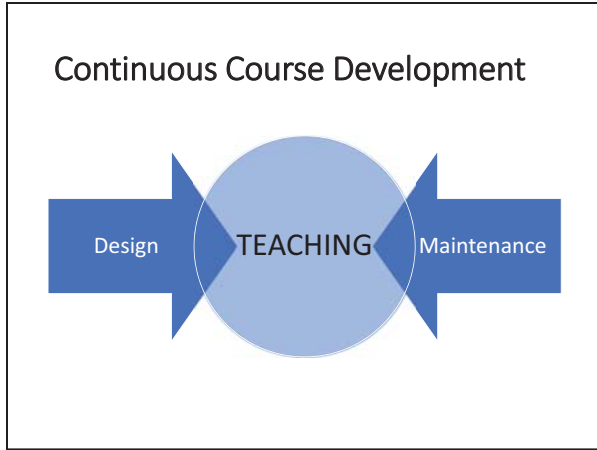
Collaboration with instructional design team and colleagues

- Program alignment
- Maximize resources
- Consistency
- Comprehensive curriculum

Context 3: Single Course / Multiple Instructors / Growth

Collaboration with colleagues, instructional design team, and administrators

- Scalability
- Quality oversight
- Maintenance
- Faculty support



Collaborating Across NU for Accessible Video

Heath Tuttle,^{1,2} Jane Petersen,^{1,3} and Jaci Lindburg^{1,4}

1 University of Nebraska Information Technology Services

2 University of Nebraska–Lincoln

3 University of Nebraska at Kearney

4 University of Nebraska at Omaha

Recent budget trends have led to more collaboration across university systems. These collaborations help members solve common problems, share resources, and develop and support innovative initiatives beyond what individual institutions could do alone. Historically, higher education institutions have fallen behind in ensuring accessibility for teaching and learning systems in general, and specifically for video. In the past several years, the University of Nebraska campuses have seen an increased need to meet accessibility requirements for video, particularly in online courses. In this session, members of ITS from each campus will present processes and outcomes that led to selecting ilos as the system-wide tool for video storage and captioning. Ilos allows NU to focus on pedagogical design and instructional support for our faculty, while the system takes care of the infrastructure and workflow needed to ensure we meet accessibility standards. This session will also outline the strategies employed to make a system-wide decision, describe the benefits for faculty and students, and explain the leadership lessons learned.

As a result of participating in this session, attendees will:

- understand more about ilos, an accessible video platform employed across the NU system;
- describe why accessibility is important and the other benefits to creating accessible course content;
- learn more about system-wide selection and approval of a common tool.

May 8, 2018

Collaborating Across NU for Accessible Video

Heath Tuttle, NU ITS - UNL
Jaci Lindburg, NU ITS - UNO
Jane Petersen, NU ITS - UNK

Agenda

Academic Technology

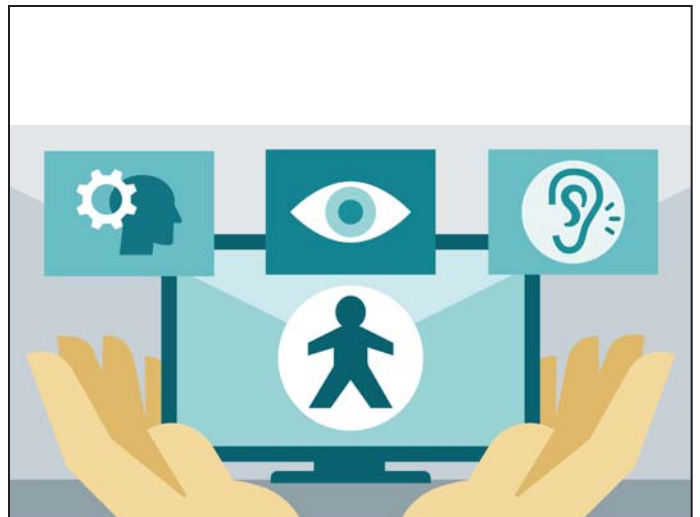
- Community of Practice
- Journey to ilos
- Using ilos
- Lessons Learned
- Q & A



Academic Technology
Community of Practice



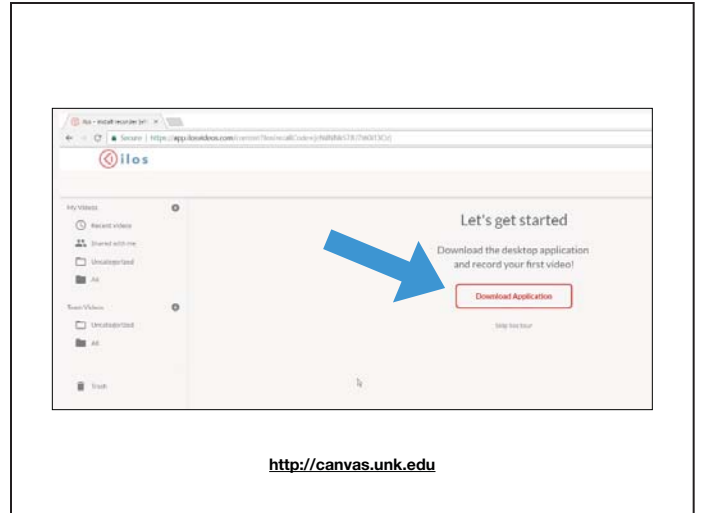
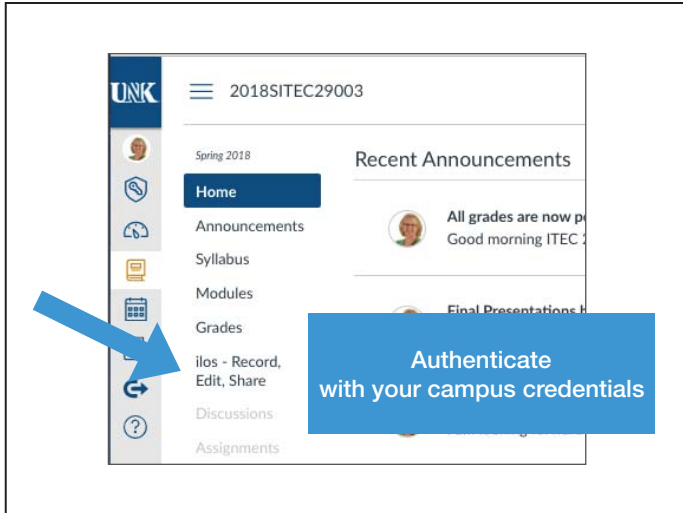
NEGOTIATION



Record



- Authenticate and install ilos Screen Recorder
- Recording
- Requesting Closed Captioning
- Adding ilos video to a course
- Analytics



Structuring Security for Success

Matt Morton^{1,2} and Rick Haugerud¹

1 University of Nebraska Information Technology Services

2 University of Nebraska at Omaha

An overview of the approach and strategy for the reorganization of security. Review of the structure and how it aligns with others in the industry and best practices. What the future plans are and where do we see the organization growing to address the increased needs for security now and in the next 5 years.

1. How does our organizational structure align with higher education and industry best practices
2. What are the key initiatives driving security in the next year.
3. Lessons learned on how to (and how not to) implement change.



Organizing for Security

- Some organizations use the term “security program” to describe the entire set of personnel, plans, policies, and initiatives related to information security
- Among the variables that determine how to structure an InfoSec program are organizational culture, size, security personnel budget and security capital budget
- Multiple Sources of research/reference
 - Carnegie Mellon
 - Gartner
 - Management of Information Security 5th Ed.

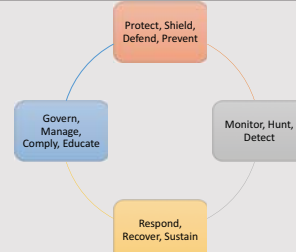
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Functions Needed for InfoSec Program

- Risk assessment
- Risk management
- Systems testing
- Policy
- Legal assessment
- Incident response
- Planning
- Measurement
- Compliance
- Centralized authentication
- Systems security administration
- Training
- Network security administration
- Vulnerability assessment

3

Four Primary Functions (CM)



Security in Large Organizations

Information security departments in such organizations tend to form and re-form internal groups to meet long-term challenges even as they handle day-to-day security operations

Functions are likely to be split into groups

In contrast, smaller organizations typically create fewer groups, perhaps only having one general group of specialists

5

Multiple Approaches

Performed by nontechnology business units outside the IT area of management control, such as: Legal and Training

Performed by IT groups outside the InfoSec area of management control, such as: Systems security administration; Network security administration and Centralized authentication

Performed within the InfoSec department as a customer service to the organization and its external partners, such as: Risk assessment; Systems testing; Incident response planning; Disaster recovery planning; Performance measurement and Vulnerability assessment

Performed within the InfoSec department as a compliance enforcement obligation, such as: Policy; Compliance/audit and Risk management

6

Internal Staff as Contractors

- CM introduces the concept of other units "contracting" out security functions.
- Example 1
 - Firewall management in Networking
 - Networking is a contractor for security
- Example 2
 - Help Desk Personnel provide front line "triage" of security incidents
 - They are "contracting for security."

7

Very Large Organization

8

InfoSec Staffing in a Medium Organization

1 Full-time manager and partial-support staff members

9

Carnegie Mellon Model

10

Security in Small Organizations

- a single security administrator with perhaps one or two assistants for managing the technical components
- It is not uncommon in smaller organizations to have the systems or network administrators play these many roles
- Virtual CISO offerings – sometimes the small organization can contract their security needs from outside their organization for less than the cost of staffing it fully.

11

IT Department

12

Other Options

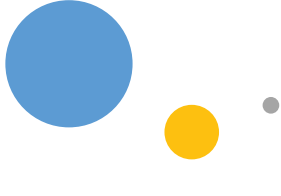
Outside of IT

General Counsel

Risk and Compliance

Board of Trustees

Outsourced



Components

NIST Elements of a Security Program

Primary Element	Components
Policy	Program policy, issue-specific policy, system-specific policy
Program management	Central security program, system-level program
Risk management	Risk assessment, risk mitigation, uncertainty analysis
Life-cycle planning	Security plan, initiation phase, development/acquisition phase, implementation phase, operation/maintenance phase
Personnel/user issues	Staffing, user administration
Preparing for contingencies and disasters	Business plan, identify resources, develop scenarios, develop strategies, test and revise plan
Computer security incident handling	Incident detection, reaction, recovery, and follow-up
Awareness and training	3EIA plans, awareness projects, and policy and procedure training
Security considerations in computer support and operations	Help desk integration, defending against social engineering, and improving system administration
Physical and environmental security	Guards, gates, locks and keys, and alarms
Identification and authentication	Identification, authentication, passwords, advanced authentication
Logical access control	Access criteria, access control mechanisms
Audit trails	System logs, log review processes, and log consolidation and management
Cryptography	TKL, VPN, key management, and key recovery

What is Security Operations?

- Analysts
 - People that respond to security threats
- Security Services
- Technology
 - Monitoring
 - Analyzing
 - Reporting
 - Analytics



Services

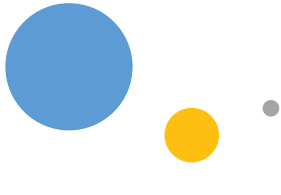
Incident Response

Malware Analysis

Forensics

Threat Intelligence


Vulnerability Management

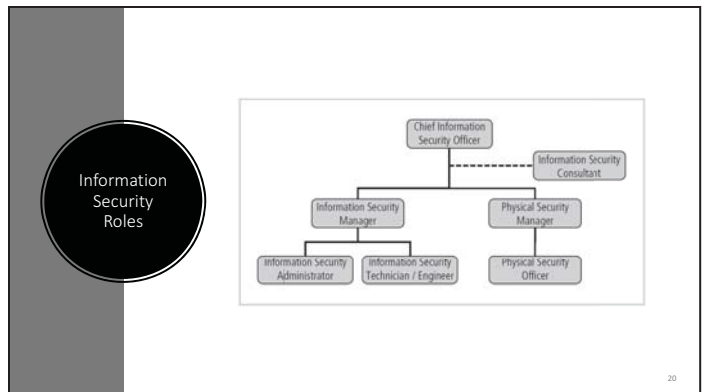


Roles and Titles

Information Security Titles

- A typical organization has a number of individuals with information security responsibilities
- While the titles used may be different, most of the job functions fit into one of the following:
 - Chief Information Security Officer (CISO) or Chief Security Officer (CSO)
 - Security managers
 - Security administrators and analysts
 - Security technicians
 - Security staffers and watchstanders
 - Security consultants
 - Security officers and investigators
 - Help desk personnel





- Security managers are accountable for the day-to-day operations of the InfoSec program
- They accomplish objectives identified by the CISO, to whom they and they resolve issues identified by technicians, administrators, analysts, or staffers whom they supervise
- Managing security requires an understanding of technology but not necessarily technical mastery
- Manage people or processes or “things”

Security Managers

- The security administrator is both technical knowledge and managerial skill
- The security analyst is a specialized security administrator that, in addition to performing security administration duties, must analyze and design security solutions within a specific domain
- Security analysts must be able to identify users’ needs and understand the technological complexities and capabilities of the security systems they design
- Includes the people who watch intrusion consoles, monitor e-mail accounts, and perform other routine yet critical roles that support the mission of the InfoSec department

Security Administrators and Analysts

- Security technicians are the technically qualified individuals who configure firewalls and IDPSs, implement security software, diagnose and troubleshoot problems, and coordinate with systems and network administrators to ensure that security technology is properly implemented
- A security technician is usually an entry-level position, but one that requires strong technical skills, which can make this job challenging for those who are new to the field, given that it is difficult to get the job without experience and yet experience comes with the job
- Security technicians who want to move up in the corporate hierarchy must expand their technical knowledge horizontally, gaining an understanding of the general organizational issues of InfoSec as well as all technical areas

Security Technician or Specialist

- The InfoSec consultant is typically an independent expert in some aspect of InfoSec
- He or she is usually brought in when the organization makes the decision to outsource one or more aspects of its security program
- While it is usually preferable to involve a formal security services company, qualified individual consultants are available for hire

Security Consultants

Sizing the Security Organization

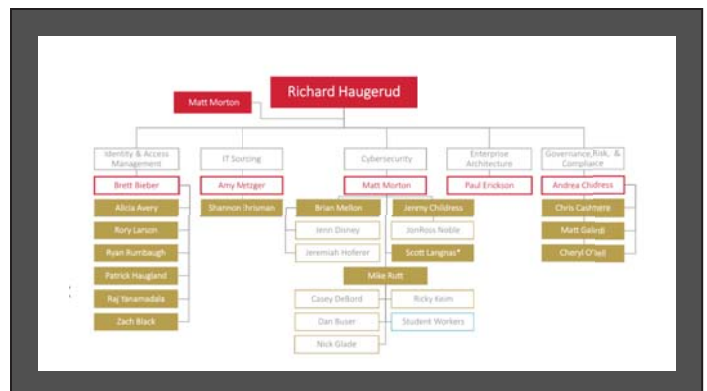
- Number of end users per security full time equivalent (FTE)
 - 75% of organizations reported 500–3,000 end users per security FTE
 - 25% 500–1,000; low risk appetite
 - 25% 1,000–2,000; medium risk appetite
 - 25% 2,000–3,000 (33% for federal government) high risk appetite
- Example
 - Organization has 3000 employees
 - Low risk – 3-6 in security
 - Medium risk – 1.5 – 3 in security
 - High risk – 1-1.5 in security

Sizing the Security Organization cont'd

- Enterprises that are information centric, with a considerable Internet exposure and a low risk appetite, should typically expect to have a staffing ratio closer to the 500 users to 1 security FTE
- Enterprises with less data dependence, less Internet exposure, and a higher risk appetite might expect a ratio closer to 3,000 users to 1 security FTE
- On average - Security budget as a percentage of IT budget: 5.1%

NU Model

- Operations
- Threat Intelligence
- Engineering
- Governance, Risk and Compliance
- Identity and Access Management



Lessons
Learned

Some relationship to size
and risk appetite

Some relationship to
maturity of security program

Must address operational
aspects first

Keys to Organizational
Design

- Define services that align with your business
- Start slow and organize around operational need
- Identify your pain points
- Work up manual processes and then automate
- Choose and MSSP to offset gaps
- Choose metrics to measure outcomes from organizational design



Questions?



Future Directions for University of Nebraska Wireless Networking

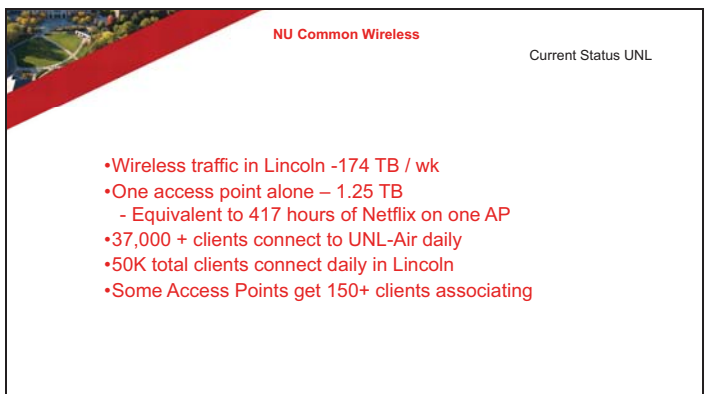
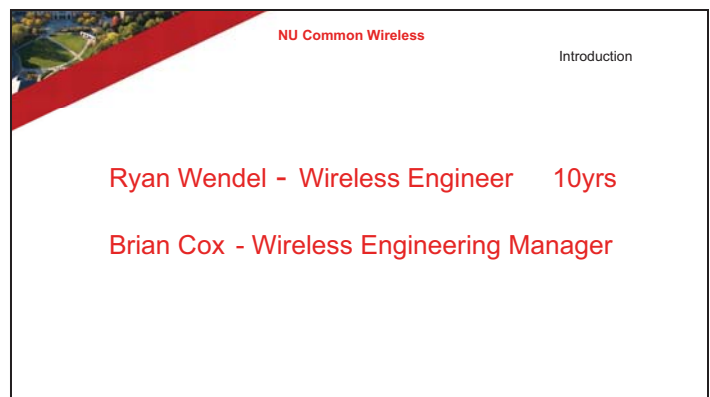
Brian Cox^{1,2} and Jay Wilmes^{1,3}

1 University of Nebraska Information Technology Services

2 University of Nebraska at Kearney

3 University of Nebraska–Lincoln

Information Technology Services is working to take the separate wireless network environments currently found throughout the University of Nebraska and move toward a single network, providing a common and convenient network environment throughout the university. This session will leave the audience with a general feel for where the network is headed and what it means to the University community.



NU Common Wireless Current Status UNK

- Wireless traffic in Kearney - 304 TB April 2018
- 16,800 + clients connected
- 9,132,000 Sessions
- Average session length 11 minutes
- Average client passes 33 MB each session
- 5,600 guest connections – guest access has been restricted

NU Common Wireless Current Status UNO

- Wireless traffic in Omaha – Last 4 weeks 65 TB
- no housing traffic – only campus traffic
- Peak about 8000 clients connected simultaneously
- 49,300 unique clients
- Only 1.56% currently use eduroam
- 45% are Apple devices
- 84% of UNO connect with a guest connection

NU Common Wireless High Level Objectives

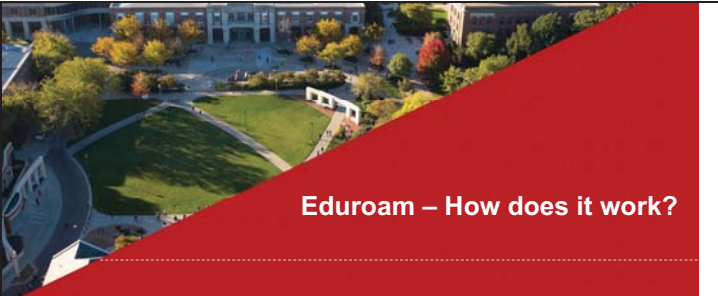
- Faculty/Students/Staff connect on all campuses – the same
- Common tool set to simplify management / Support
- Reliable / Cost effective / Proven
- Vendor agnostic – multiple vendors to support
- Reduce the number of SSID's to 3 across campuses
- UNL-Air, UNKGuest, UNOSecure etc.

NU Common Wireless Common State

Current SSID's		Proposed
Eduroam	UNL-Guest	eduroam
UNL-Wireless-Registration	GetConnected@UNK	
UNOGuest	LiedTS	
UNOSecure	NUPolice	
iClass	fanTM	
BECIGuest	UNCA	
CECPartner	UNKGamebox	
UNKGuest	UNL-AIR	
UNL-AIR-E	UNL-Conference	
		NU-Guest

NU Common Wireless What does this mean?

- eduroam** primary secure SSID - 802.1x/WPA2 Enterprise
- NU Guest** – Guest access SSID– common security / port rules / access limits
- NU Connect** – On boarding SSID – simplify user authentication
- NU Connect** – used by IoT as well



Eduroam – How does it work?

How can I connect to eduroam?

N

Nebraska UNL

NU Common Wireless Manual Method

eduroam requirements to securely connect:

- 1) Select the "eduroam" SSID
- 2) Must choose security type (WPA2 Enterprise)
- 3) Authentication set to PEAP
- 4) Must check box for "Validate server certificate" & install certificate
- 5) Check box to "Connect to these servers"
- 6) Enter List of valid servers
- 7) Must make sure the "Secured password" (EAP-MSCHAP v2) is the selected for the Authentication Method

NU Common Wireless Manual method (cont.)

- 8) Must make sure the "Automatically use my Windows logon name and password" is UNCHECKED
- 9) In the "eduroam Wireless Network Properties" window click on the "Advanced settings" box check the box "specify authentication mode;" and choose "User authentication" from the pull-down menu
- 10) In the "Windows Security" window type in your My UNL id and add "@unl.edu and the My UNL id password

-At this point you *should* be connected to eduroam
-Steps vary depending on operating system (Windows vs. Mac)

NU Common Wireless On boarding


So how do we simplify this process?

NU Common Wireless On boarding

The On boarding simplifies this to a two-step process

- 1) Associate to NU-Connect SSID
 - Browser automatically re-directs client to the on boarding application & detects the devices OS
- 2) Run the application – enter credentials – automatically installs certificate & modifies settings as defined

Device is now securely authenticated & connected to eduoam



NU Common Wireless On boarding

NU Common Wireless On boarding

IoT – Headless devices – wireless devices that cannot support enterprise security

- Authenticated user must register MAC addresses first
- NU-Connect is their SSID
- We limit what device types can connect to this SSID
- Anything that is iOS, OS-X, Windows, Linux, and Android is limited to the on boarding application splash page

NU Common Wireless On boarding IoT devices

NU Common Wireless

Guest devices

NU-Guest

- Same process as what is at Lincoln and Kearney
- Splash page that guests will sign up for an account
 - Cell number
 - Email address

NU Common Wireless

Benefits

What are the benefits?

1. Universal user experience
2. Encrypted client traffic
3. Less confusion and user interaction
4. Increased wireless efficiency



Next steps

Challenges

Implementation timeline



NU Common Wireless

Challenges

- Networking alignment
- Common Hardware
- Management tools
- Campus specific use case of wireless
- Eduroam – UNMC
- Funding
- Policies – Security, access, authentication
- Other OneIT initiatives
- Working campus – minimize disruption
- Communications

NU Common Wireless

Implementation

Depends....

Objective to complete by EOY

NU Common Wireless

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NU Common Wireless

Questions?

Using Learning Analytics in Canvas to Improve Online Learning

Martonia Gaskill and Phu Vu

University of Nebraska at Kearney

The overarching goal of this presentation is to discuss the use of learning analytics in Canvas to track and predict students' performances and to provide timely support for success in online courses. In addition, the issue of students' privacy in online courses will also be reviewed through preliminary survey data. According to Horizon Report 2016, learning analytics is an educational application of web analytics aimed at learner profiling, a process of collecting and analyzing details of individual student performances in their online courses. Learning analytics has developed in three stages, moving from an emphasis on hindsight to foresight.

The first stage was describing results, the second stage was diagnosing, and the third stage is predicting what will happen in the future. Within the scope of this presentation, we will 1) present how we are using learning analytics, collected in Canvas courses in the instructor's role, to track and diagnose students' performances; 2) discuss our plan to dive deeper into learning analytics with a powerful tool of Google analytics in the third stage of predicting students' performances; 3) review preliminary survey data about students' perspectives on the issue of privacy of their learning behaviors in Canvas. The presentation will conclude with tips of how to use the learning analytics feature in Canvas and a call for research collaboration at the UN level to unleash the power of this feature to improve students' success in online and blended learning.

Participants take away includes:

1. Understand the goal learning analytics
2. Learn how to use learning analytics in Canvas
3. Get insights on issues related to students' privacy in online learning

Improving Online Learning with Learning Analytics



Dr. Phu Vu
vuphu@unk.edu
Dr. Martonia Gaskill
gaskillmc@unk.edu

Personal Story

How learning analytics saved me
in my first year at UNK.

What Can We Collect/See as Online Instructors?

1. Students' login time
2. Students' rates of participation in specific activities

What Can We Collect/See as Online Instructors?

3. Amount of time spent interacting with online resources or with other students
4. Students' academic performances



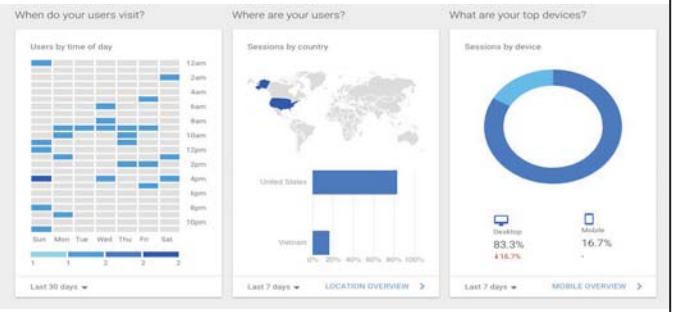
1. **Activity** allows the instructor to see when students view a page or participate in the course.
2. **Submissions** allows the instructor to view if students submit the assignment on-time, late, or not at all.
3. **Grades** use a box and whisker plot to show the distribution of grades in the course.
4. **Student Analytics** shows page view, participations, assignments, and current score for every student in the course.

Reference: Retrieved from <https://community.canvaslms.com/docs/DOC-10299>

Still Hungry for Data? Google Analytics

1. Location
2. Devices
3. Course page navigation

Google Analytics



What Can We Do with this Data?

1. Describe and diagnose students' learning performances
2. Predict students' learning performances

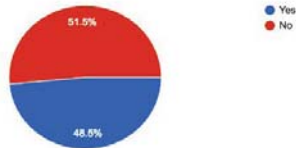
What Can We Do with those Data?

4. Make data-driven instructional decisions
5. Do research with your own available data

Students' Perspectives on the Issue of Privacy

Are you aware that most of your learning behaviors in your online courses such as login frequency, visit history ...tored and recorded by your instructors?

202 responses

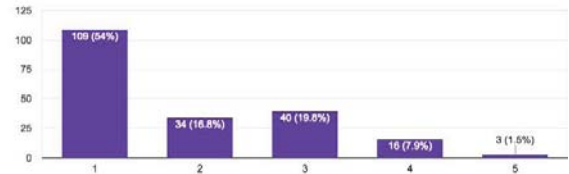


Data from a recent survey with graduate students in the College of Education at UNK

Students' Perspectives on the Issue of Privacy

Are you concerned about the fact that most of your learning behaviors in your online courses such as login freq...ored and recorded by your instructors?

202 responses

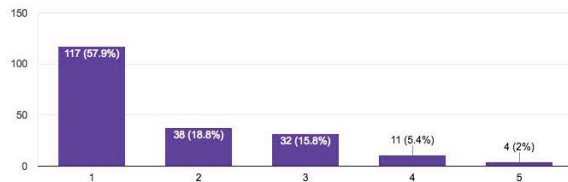


Data from a recent survey with graduate students in the College of Education at UNK

Students' Perspectives on the Issue of Privacy

Are you concerned if your instructors collect your learning data in your online courses such as login time...et...tc) for academic or research purposes?

202 responses

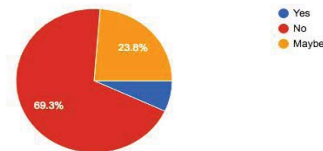


Data from a recent survey with graduate students in the College of Education at UNK

Students' Perspectives on the Issue of Privacy

Do you think your privacy is violated in the online learning environment because the instructors can track, reco...ur learning behaviors in their courses?

202 responses



Data from a recent survey with graduate students in the College of Education at UNK

Questions?

Thank you!

Translating Studio Courses Online

Claire Amy Schultz

University of Nebraska at Kearney

This presentation will highlight some of the successes and struggles of translating a studio art class to the online format. Teacher reflections on pedagogical and instructional designs will be shared along with ways to provide students with a quality studio course experience in an online format.

1. Effectively incorporating VoiceThread in to online studio course design
2. Delivering studio content effectively online
3. Providing effective formative feedback to students' in progress works

Hidden Treasures: Lesser Known Secrets of Canvas

Julie Gregg, Melissa Diers, and Analisa McMillan

University of Nebraska Medical Center

Join us as we explore some of the little-known Canvas secrets and tools that you can use to make your user experience more manageable in the Canvas Learning Management System (LMS). In this session, we will share tools, tips, and tricks that will help you take your Canvas skills to the next level. We did the research and want to share the tools and tricks we found that will help you make the most out of the Canvas dashboard, course setting, rich-text editor, grade book, calendar and more!

The participant should learn to:

Identify lesser known tools and features in Canvas

Describe examples of how tools, tips and tricks demonstrated can make for a more manageable user experience

Employ Canvas tools to enhance the user experience

HIDDEN TREASURES: Lesser known secrets of Canvas

ATTENDANCE

Enabling the Attendance Feature

The Attendance (Roll Call) tool is an external app (LTI) used for taking attendance in Canvas courses. The Attendance tool can be used for online or face-to-face courses. The Attendance tool always appears as a visible Course Navigation link, but it cannot be viewed by students, so hiding the link in Course Settings is not necessary.

To turn on Roll Call Attendance:

1. Click **Settings** in the Course Navigation panel.
2. Click the **Navigation** tab.
3. Drag the **Attendance** block to the visible area or right-click the **Attendance** block and click **Enable**.
4. Click **Save**.

<https://community.canvaslms.com/docs/DOC-13077-4152107412>

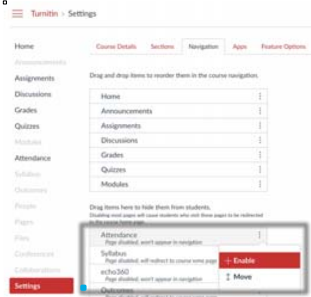
Taking Attendance

Once the attendance tool is set up in your course, and your course is published, you can start to take attendance using Roll Call.

To take attendance:

1. Click the **Attendance** tab in the Course Navigation.
2. Select the student and click **More**.
3. Mark the student **Present**, **Absent**, or **Late**.

Currently you can only view Roll Call on a day-by-day basis. To view additional dates, you can run an attendance report for your course.



Roll Call

Turnitin - Turnitin Sandbox

Home

Assignments

Discussions

Grades

Quizzes

Attendance


Settings

Attendance: 100%

Creating a Seating Chart

1. To view the class in the seating chart format, click the **Class** tab.
2. To set a setting arrangement, click the **Edit Seating Chart** tab.


For more information about using seating charts, refer to: <https://community.canvaslms.com/docs/DOC-13058-4152107416>



Grading Attendance

After the first time you take roll call, Canvas automatically creates an assignment for Roll Call Attendance and adds a column to the Gradebook. By default, attendance is worth 100 points.

Note: The Attendance assignment will not appear until you have taken roll for at least one student.



Note: Although students cannot view the actual attendance tool, they can still view the attendance assignment in the Assignments page. This assignment cannot be hidden from students.



Instructors can edit several components of the Roll Call Attendance assignment:

1. You can edit the assignment and change the point value.
2. You can remove Attendance from the Gradebook completely by changing the assignment type. **Note:** Once you have changed the assignment type, you cannot change it back to a graded assignment. *Please ensure you do not want to grade Attendance before changing the assignment type.*
3. You can exclude the attendance assignment from the final grade.
4. If you are using weighted assignment groups, you can create a new weighted assignment group and move the attendance assignment into that group.

For more information on grading attendance: <https://community.canvaslms.com/docs/DOC-12871-4152430299>

For Fun: Adding Images to your modules

To add fun icons to your modules...

1. Go to <https://emojipedia.org/>.
2. Select your emoji. The emoji appears with an explanation and a copy button. Click **Copy**.
3. Go to the **Modules** tab in your course.
4. Click **Edit** next to the module header.
5. Paste (Ctrl + V or Command + V)



CALENDAR

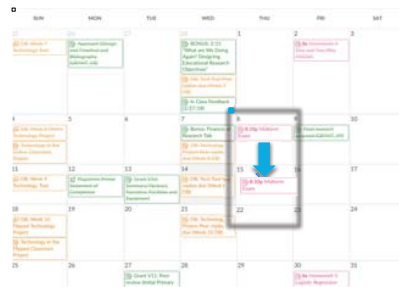
Canvas Calendar:

The Calendar is a great way to view everything you have to do for all your courses in one place.

In Global Navigation, click the **Calendar** link.

Each personal, course, and group calendar is identified by a separate color that populates the calendar view. Associated assignments for each course or group will appear within the calendar view for each calendar.

Note: Canvas will assign an arbitrary color for each calendar unless a custom color is chosen. Each calendar contains 15 default colors, but you can insert a Hex code to create any color of your choice. Colors set in Dashboard course cards also update in the calendar.



2. You change the date of an event or assignment in the same calendar by dragging and dropping the event or assignment to a different date on the month view or mini calendar. Click the event or assignment, drag to the new date, and release your mouse.

Note: You can also select the event/assignment, and then click **Edit**. Here you can edit the event Title, Date, specify a time range, and Location. You can move the event to a different calendar using the Calendar drop-down menu [5].

For more information on using the Calendar visit: <https://community.canvaslms.com/docs/DOC-12911-41525466> or <https://community.canvaslms.com/docs/DOC-13061-415254672>

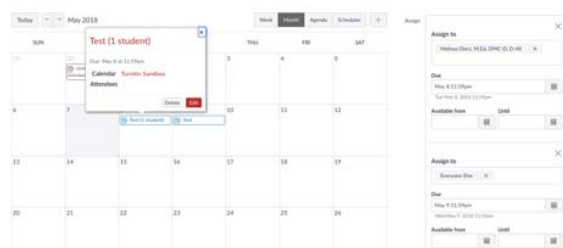
Canvas Calendar:

The Calendar displays all Assignments according to due date, which causes assignments, discussions, and quizzes with multiple sections and due dates to appear more than once in the Month view.

Assignments that are for everyone in the course will not have a user, section, or group associated when hovering over the assignment title [2], meaning it is due on the same date for all students and only appears on the Calendar due date.

Multiple Due Dates will appear across your entire course including Quizzes, Assignments, Discussions, Syllabus, Modules, Course Analytics, Calendar, and SpeedGrader.

<https://community.canvaslms.com/docs/DOC-10036-4152101241>



Scheduler:

The calendar also includes an optional scheduling tool in Canvas. You can create appointment groups in the Scheduler. Appointment groups create a block of time where students can meet with you. Students can sign up for appointment times in their own calendars. Appointments will appear in your calendar after a student or group has reserved a time slot.

1. Click **Calendar** on the Global Navigation.
2. Click **Scheduler**.
3. Click **Create an Appointment Group**.
4. Click **Publish**.

Notes:

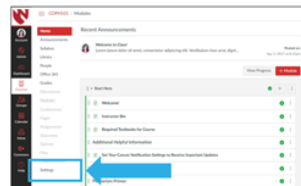
If user participation is limited to dates between the **course start and end dates**, Scheduler events cannot be edited or deleted after the date the course ends.

View the appointment dates and times in your course calendar. Time slots that have been reserved by students will show as a solid color.

<https://community.canvaslms.com/docs/DOC-12920-4152716604>

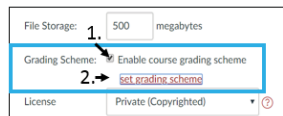
Canvas Course Settings

Select "settings" from the course navigation

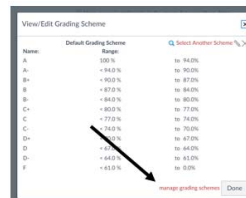


Add a letter grade to the total column in the gradebook

1. Select "enable course grading scheme" -> select set grading scheme



2. To create a new grading scheme -> select manage grading schemes



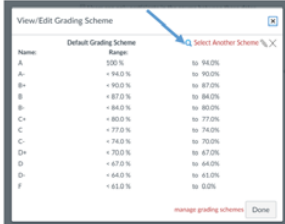
3. Select "+ Add grading scheme"



4. Name and complete your grading scheme -> select save



5. Select "select another scheme"



6. Select your course or college grading scheme



7. Select "use this grading standard"

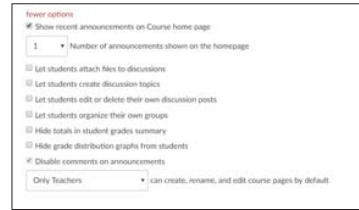


8. Check for letter grade in total column in gradebook



More Options Link in Settings

Select checkboxes for options and save settings



Add Announcements to Home Page



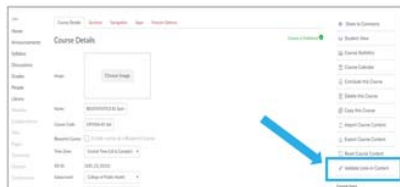
Hide Grade distributions graphs from students

Default allows students to view distributions, to turn them off select "Hide grade distributions from students" and save settings.

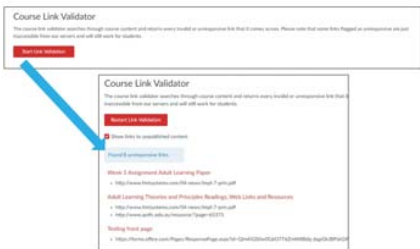


Course Link Validator

1. Select "Validate links in content"



2. Select "Start link validation" and review unresponsive links. Correct or change if necessary



Student View

1. Select "Student View"



2. Navigate through course and select "Leave Student View" to return to instructor view

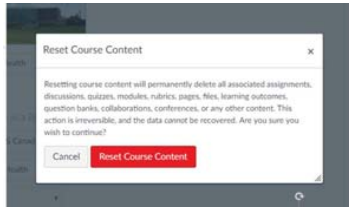


Reset Course Content

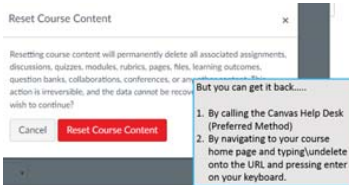
Select "Reset Course Content"



1. Select "cancel" if you DO NOT want to reset course and delete content. Select "Reset Course Content", if you wish to reset your course and delete all your material.



If you reset but need to restore your course, you can contact the Canvas help desk or by using the URL Undelete method below.

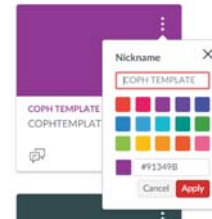


Changing Colors on Course Cards

1. Select the three dots on the card you wish to change



2. Select new color by clicking on shade -> select apply



Dashboard Course Card Organization

1. Select Courses from the Global navigation -> select all courses



2. Select and deselect stars (Colored starred courses are displayed on Dashboard)

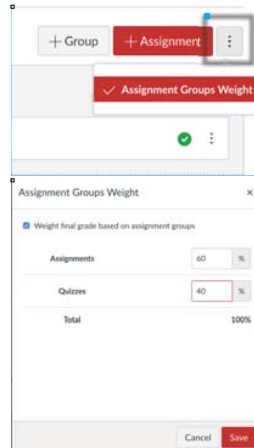


GRADEBOOK

Weighting Grades

You can weight final grades based on assignment groups. You can assign a weight to each assignment group, but not the individual assignments.

1. Click the **Assignments** tab.
2. Click the 3 dots icon.
3. Click **Assignment Groups Weight**.
4. Click the Weight final grade based on assignment groups checkbox.
5. The Assignment Groups appear. Now you can assign the desired weight to your Assignment group (s) and click Save.



Enter the percentage weights for each of the different Assignment Groups you created. The percentage weights you specify here will determine how Canvas calculates the final grade for your course. These percentages can be changed at any time and students will be notified when any changes are made. The weights will show up in the Gradebook for both students and instructors.

Notes:

- Assignment group weights can include decimals.
- The total percentage of all assignment groups can be set above or below 100%.
- (Please visit <https://community.canvaslms.com/docs/DOC-10059-415267002> for more calculated information.)

Messaging Students from the Gradebook

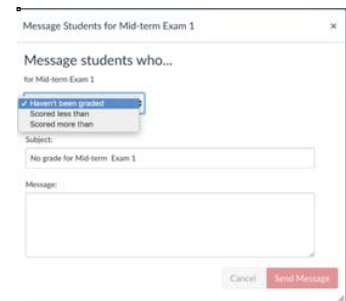
You can use the Gradebook to send messages to your students. Message subjects are filtered based on specific assignment categories:

- **Haven't submitted yet**—students who haven't submitted the assignment.
- **Haven't been graded**—students whose assignments have not yet been graded (submitted or unsubmitted).
- **Scored less than [point value]**—students who earned a grade on their assignment less than X number of points.
- **Scored more than [point value]**—students who earned a grade on their assignment more than X number of points.

Although one message most likely will be sent to multiple students at the same time, each student will receive an individual message.

1. Click the **Grades** tab.
2. Click the 3 dots next to assignment title.
3. Select **Message Students Who...**

For more information: <https://community.canvaslms.com/docs/DOC-13711-73553813641>



Moving the Total column to the front of the Gradebook: You can move the Total column to the front of the Gradebook to quickly see an overview of student progress in your course.

1. In Course Navigation, click the **Grades** link.
2. Access the Gradebook for your course and scroll to the Total column. Hover your cursor over the column header until the blue toggle arrow or 3 dots appear(s).
3. Select the **Move to front** menu option.

You can move the Total column back to the end of the Gradebook at any time by clicking the blue toggle arrow in the Total column and selecting **Move to end**.

<https://community.canvaslms.com/docs/DOC-13041-4152252179>



Excusing a Grade: You can use the Gradebook to excuse a student from an assignment, discussion, quiz, or group assignment. Excused assignments are not calculated as part of a student's total grade. The assignment is removed from the calculation for the total grade, so it will neither benefit or detract from their total score. This also applies to weighted grades.

1. In Course Navigation, click the **Grades** link.
2. Locate the student and the assignment you want to excuse.
3. Type "EX" in the appropriate column

When an assignment is excused, the assignment page and the student grade page will show the student that he or she has been excused from the assignment. Students cannot submit excused assignments.
<https://community.canvaslms.com/docs/DOC-12938-4152386299>



SpeedGrader Settings and Navigation:

As an instructor, SpeedGrader allows you to view and grade student assignment submissions in one place using a simple point scale or complex rubric. You can also provide feedback to your students with text or media comments. There are three sections to the SpeedGrader interface: Navigation, Markup and the sidebar bar.



The sidebar provides all the details about the submission for the student. This is where you enter the grade and or provide feedback. Feedback options include video, text, audio to text or attached files.



The left side of the menu includes general settings and options:

1. **Gradebook Icon:** Return to the Gradebook
2. **Mute Icon:** Mutes or unmutes the assignment (students can't see the grade until you unmute)
3. **Keyboard Icon:** Opens a list of keyboard shortcuts for SpeedGrader.
4. **Help Icon:** Opens the Canvas help menu
5. **Settings Icon:** Opens the SpeedGrader Settings menu [S], which includes enabling [student list sorting options](#) and [anonymous grading](#).



The right-side of the menu includes grading information such as

1. The number of assignments that have been graded out of the total number of submissions
2. and the average score and percentage You can use this information to keep track of your grading progress.

The right side of the menu bar includes the student list for the assignment. SpeedGrader opens the assignment for the first student listed in the student list, arranged alphabetically by last name. If you have activated student view, the Test Student will be shown at the end of the student list. The student list also displays the status of each student's submission

3. Click the red arrow to view the student drop down list.
4. Navigate the left and right arrows to move forward and back between students for easy grading.

For more information about using SpeedGrader, visit: <https://community.canvaslms.com/docs/DOC-12774-415255021>

QUOTAS

The overall UNMC Canvas contract includes the storage limit for the entire UNMC instance (submissions, personal files, etc.) is 500MB per FTE. UNMC has 3717 contracted FTE's = approximately 1.85TB total. There are three system-wide limits within Canvas:

1. **COURSE LIMIT:** The overall system-wide course limit is currently set at 500MB. Limit includes all Teacher file uploads in the course. The Canvas System Administrator can manually set an individual course limit.
2. **USER LIMIT:** The overall system-wide user file limit which is currently set at 100 MB. User files are a cumulative total of all files uploaded from all courses. The Canvas System Administrator can manually set an individual course or group limit but not an individual user limit. The user limit is only changed at a system-wide level.

File uploads count towards a user limit:

1. Manual uploaded files via the "Files" area
2. Profile picture
3. Files uploaded in an **ungraded** discussion post
4. Attached files when utilizing the internal email within Canvas

Files which are uploaded as an assignment or a **graded** discussion post do not count towards the user files limit.

A graded discussion post is defined as the check box located under "Options" is checked. If you would like the discussion post not to be graded, but not count against the user limit, type a 0 in the "Points Possible" box.

Keep in mind the discussion post will be displayed in the Grade Center but not be calculated in the overall grade.

<https://community.canvaslms.com/docs/DOC-10565-421241989>
<https://community.canvaslms.com/docs/DOC-10687-4212189819>

3. **GROUP LIMIT:** The overall system-wide group limit which is currently set at 100 MB. Limit includes files which are uploaded in the group page. The Canvas System Administrator can manually set an individual group limit.

FILES THAT DON'T COUNT TOWARDS QUOTAS

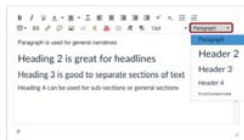
1. Assignments – Record and upload media
2. Conference - Recordings
3. Conversations - Record and upload media (except recorded on mobile device - saved to My Files)
4. Rich Content Editor - Record and upload media
5. SpeedGrader - Record and upload media

<https://s3.amazonaws.com/tr-learncanvas/docs/CanvasMediaComparison.pdf>

RICH CONTENT EDITOR

TinyMCE Editor: The Canvas rich content editor is available in the following Canvas features: announcement, assignments, discussion, pages, quizzes and syllabus. utilizes the tinymce rich content editor. The tinymce rich content editor keyboard shortcuts can be used within canvas: <https://www.tinymce.com/docs/advanced/keyboard-shortcuts/>

Paragraph drop-down menu: Use the Paragraph Drop-down Menu instead of Font Size to make text accessible for screen readers. Paragraph is used for general narratives. Heading 2 is used for headlines. Heading 3 is used to separate section of text. Heading 4 is used for sub-sections or general sections.



Hyperlinks: To add the accessibility information for a hyperlink

In the rich content editor, highlight the text on the page, press CTRL + K (Windows) or CMD + K (iOS on your keyboard).

1. Add the URL to the first box.
2. The "Text to display" box, this should already be filled in with the same text that was highlighted on your page (in this example, I highlighted the word "link").
3. The "Title" box, this is the pop-up text that you would want people to see when they hover their mouse over the link.
4. The "Target" drop-down can be set to "None" or "New window".



Single space: To separate lines of text with a single space press: SHIFT + Enter (Windows) or OPTION + Return (iOS).



Accessibility checker: The Rich Content Editor includes an accessibility tool that checks common accessibility errors within the editor. This tool can help you design course content while considering accessibility attributes and is in the Rich Content Editor menu bar.

This tool only verifies content created within the Rich Content Editor. You may also use other accessibility tools to verify additional content in Canvas.

All components are designed according to the template set in the institutions Theme Editor and verifies the following accessibility rules:

- Table captions: Tables should include a caption describing the contents of the table.
- Table header scope: Tables headers should specify scope and the appropriate structure.
- Table header: Tables should include at least one header.
- Sequential headings: Heading levels should not be skipped (e.g. H2 to H4). However, the tool does not check if the first header starts with H2 or whether the headings are sequential with the rest of the content in the page. Tables do not begin with H1, which is designated for the page title.
- Heading paragraphs: Headings should not contain more than 120 characters.
- Image alt text: Images should include an alt attribute describing the image content.
- Image alt filename: Image filenames should not be used as the alt attribute describing the image content. Currently, files uploaded directly to Canvas create a redirect that does not properly verify image filenames.
- Image alt length: Alt attribute text should not contain more than 120 characters.
- Adjacent links: Adjacent links with the same URL should be a single link. This rule verifies link errors where the link text may include spaces and break the link into multiple links.
- Large text contrast: Text larger than 18pt (or bold 14pt) should display a minimum contrast ratio of 3:1.
- Small text contrast: Text smaller than 18pt (or bold 14pt) should display a minimum contrast ratio of 4.5:1.

Note: For text contrast, the Accessibility Checker verifies color using the same calculations as the WebAIM tool and verifies against Theme Editor templates without High Contrast Styles. However, High Contrast Styles must be enabled for verification if a link color is overwritten manually in the Rich Content Editor.

STEPS:

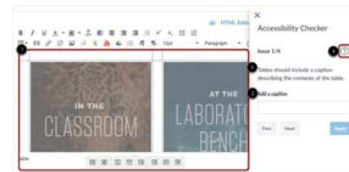
1. Open the Rich Content Editor using one of the Canvas features which support the Editor.

2. Click the Accessibility Checker icon.

Note: Depending on the width of your browser window, you may have to scroll the menu bar horizontally to view the icon.



When an issue is detected, the Rich Content Editor highlights the affected area [1]. The sidebar displays the accessibility attribute [2] and an explanation of the error [3]. To learn more about the accessibility attribute, click the **Information** icon [4]. If the Rich Content Editor contains more than one issue, you can view all issues by clicking the **Previous** or **Next** buttons



3. Click Apply button > When all issues have been fixed, or if no issues are detected in the Rich Content Editor, the sidebar indicates that no issues exist and will close automatically.

Accessibility menu: Press the following on the keyboards to open the accessibility menu:

	Windows	iOS
Open accessibility help menu	ALT + F8	ALT + FN + F8
Open editor's menu bar	ALT + F9	ALT + FN + F9
Open editor's toolbar	ALT + F10	ALT + F10

Removing formatting copied from another source: The Rich Content Editor to format text that you pasted from another source. Keyboard shortcuts:

- Windows copy and paste: Ctrl-C, Ctrl-V
- Windows copy and paste-without-formatting: Ctrl-C, Ctrl-Shift-V
- iOS copy and paste: CMD-C, CMD-V
- iOS copy and paste-without-formatting: CMD-C, CMD-OPT-Shift-V

Aligning text: The Rich Content Editor toolbar to align the text. You can set the position of the text on the page with the **Left**, **Center**, and **Right Alignment** tools or indent the text using the **Indent** tool.



Align directional text: The editor also supports directional text so users can insert content right to left. This feature can be added using the **Right to Left** button within the editor. It generally involves text containing different types of **alphabets**, but may also refer to **boustrophedon**, which is changing text directionality in each row.



Removing formatting from selected text:

1. Highlight the desired text to remove formatting
2. Click the Clear Formatting icon to remove the formatting
3. Click the Save button

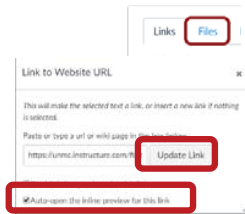
Note: When using the Rich Content Editor in Assignments, Discussions,



Pages, and Quizzes, you have the option to Save & Publish. When using the Rich Content Editor in the Syllabus and Discussions pages, the Save button may appear as “Update Syllabus” or “Post Reply”

Auto open files: The auto-open inline preview for files in available in the Rich Content Editor.

1. Open the Rich Content Editor
2. Click the Files tab
3. Find and select the file you want to insert.
4. The file name will automatically be added inside the Rich Content Editor. Place your cursor over the link and click, then click the Link icon
5. Click the Auto-open the inline preview for this link checkbox
6. Click the Update Link button
7. Click the Save button to save any changes to the post made in the Rich Content Editor



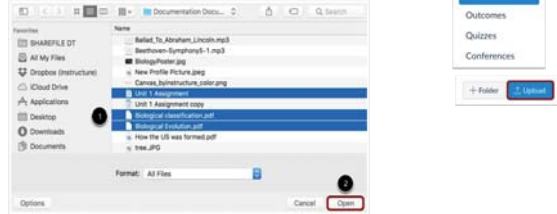
NOTE: Canvas supports previews for documents up to 100 MB and 999 pages. Supported file types

.doc .odt .sxi .docx .pdf .sxw .odf .ppt .xlsx
 .odg .pptx .xls .odp .rtf .txt .ods .sxc

UPLOADING MULTIPLE FILES

Uploading Multiple Files:

1. In Course Navigation, click the Files link.
2. Click the Upload button.
3. Select the files you want to upload to your course [1]. Click the Open button [2].



4. View the progress bars for the file uploads.



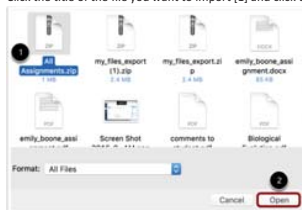
5. View the added files.

Name	Date Created	Date Modified	Modified By	Size
Biological Evolution.pdf	9:19pm	9:19pm		12 KB
Biological classification...	9:19pm	9:19pm		12 KB
Unit 1 Assignment.docx	9:19pm	9:19pm	Doug Rob...	93 KB
BiologyPoster.jpg	9:04pm	9:04pm		919 KB

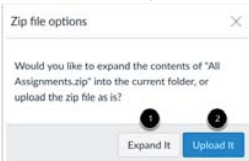
Uploading Multiple Files via ZIP: ZIP files can be imported into Canvas through Files or Course Settings. Through Course Settings, you must upload the ZIP file to an existing folder in Files. You cannot create new folders

through the Course Import Tool. ZIP files containing internal folder structure retain that folder structure upon upload.

1. You can import a ZIP file directly in Files. In Course Navigation, click the Files link.
2. Click the Upload button.
3. Click the title of the file you want to import [1] and click the Open button [2].



4. If you want to expand all the contents of the ZIP file, click the Expand It button [1]. If you want to upload the ZIP file intact, click the Upload It button [2].



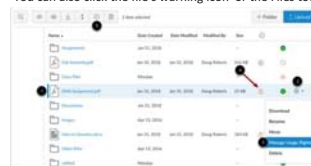
5. You can track the progression of the upload by monitoring the progress bar.
6. Your files will be uploaded to Files in Canvas.

USAGE RIGHT AND USER ACCESS FOR A FILE

If usage rights feature is enabled in your course, you must set a usage right (copyright) for each file you upload to your course. Usage rights must be assigned to files before files can be published to the course.

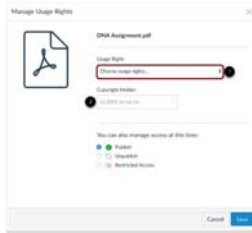
Usage Rights is currently a course opt-in feature

1. In Course Navigation, click the Files link.
2. Click the line item for the file
3. Click the Settings icon
4. and the Manage Usage Rights link
5. You can also click the file's warning icon or the Files toolbar Manage Usage Rights link



6. In the **Usage Right** drop-down menu [1], select one of five usage rights. If you are an instructor and are not sure which usage right applies to your file, please consult your institutional admin for guidance:
 - I hold the copyright (original content created by you)
 - I have obtained permission to use the file (authorized permission by the author)
 - The material is in the public domain (explicitly assigned to public domain, cannot be copyrighted, or is no longer protected by copyright)
 - The material is subject to fair use exception (excerpt or summary used for commentary, news reporting, research, or analysis in education)
 - The material is licensed under [Creative Commons](#); this option also requires setting a specific Creative Commons license

If known, enter the copyright holder information in the **Copyright Holder** field [2].



- You can also set access to the file. By default, the file is unpublished. You can also publish the file or restrict access. To select file access, click the radio button next to the access type. You can change the access at any time.



- Click the Save button.

WHITELIST

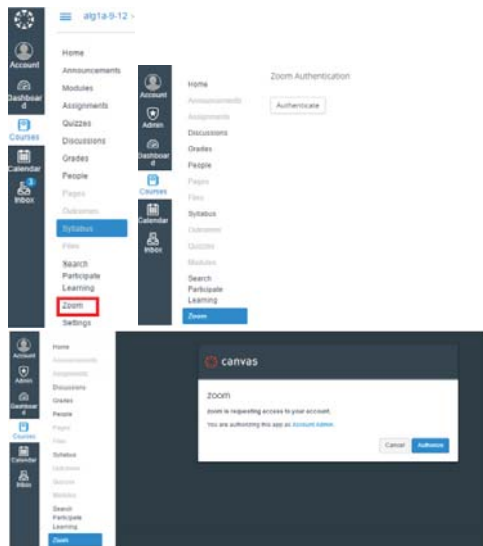
You may discover that certain HTML codes do not work upon saving. This is because Canvas will only support certain HTML elements for security reasons. This also applies to content copied and pasted from an external source. Below is a link to a list of HTML tags that are permissible in Canvas. HTML tags that are not on this list may be stripped out of the Canvas Rich Content Editor when you save your work. https://s3.amazonaws.com/tr-learncanvas/docs/Canvas_HTML_Whitelist.pdf
Whitelist includes

- Allowed HTML Tags
- Attributes on HTML Elements
- Protocols for Elements
- Allowed Style Properties
- MathML Tags

ZOOM

Zoom Installed as LTI: Zoom can be added in the course Navigation as an LTI, this is determined by your system administrator and is a system wide setting

When a user clicks the Zoom link, the Authentication page displays. The user clicks the **Authenticate** button to begin the authorization process.



Installed as External Tool: Zoom can be added into Canvas as an External App installation, this is determined by your system administrator and is a system wide setting

- Login to Canvas and select a course.
- Once in the course, click Modules.
- Click + in the Module where you'd like to add Zoom.

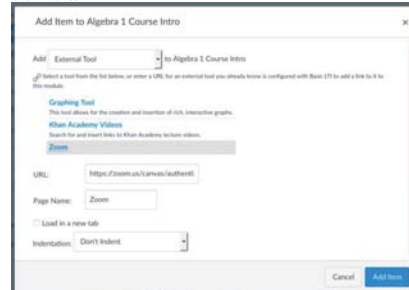


- This will open the Module options.

Choose Add External Tool.

Click Zoom.

Click Add Item.



- Click to publish the Zoom link.
- When you are ready to launch the meeting, click **Zoom**.

Your Learners, Their Devices & You: Incorporating BYOD Technology into Your Didactics

Tedd Welniak

University of Nebraska Medical Center

It is theorized that mobile technology, in its place alongside other “intellectual technologies” throughout human history, has contributed to significant shifts in the way that newer generations discover, interpret, interact with, and learn new information. The BYOD (Bring Your Own Device) movement in education has been touted as a means of actively and individually engaging these learners with content using technology that many of them may already own or are familiar with. The depth to which this movement has been applied in the medical and graduate medical education communities has been variable, partly owing to the fact that only recently have “digital natives” become old enough to be progressing through their graduate professional training. In this session, we discuss our experience with BYOD education software that allow facilitators to interact with, transmit, and manage content in real time on individual learners’ mobile devices and tablets in both small group and smaller classroom settings as means of improving engagement, actively gauging understanding, and allowing for guided self-exploration of evidence-based medicine concepts.

By the end of the session, attendees should be able to:

- 1) Review the backdrop by which the “BYOD” movement has come about as a means of teaching the “digital learner”
- 2) Become familiar with the capabilities of “device-sourcing” software such as Nearpod and Kahoot! for use in both moderate-sized classroom and facilitated small group formats
- 3) Discuss limitations and pitfalls of live “presentation-sharing” technology

Extending the Conversation about Teaching with Technology

**Marlina Davidson, Timi Barone, Dana Richter-Egger,
Ryan Schuetzler, and Jaci Lindburg**

University of Nebraska at Omaha

Over the past two years, UNO has increased the number of online course selections by nearly 50 percent, offering seven fully online undergraduate programs, seven fully online graduate programs, and an assortment of online minors, certificates, and endorsements. The need to expand the conversation about teaching with technology and cultivating effective online teaching environments has never been more important, as UNO seeks to maintain our growth in online learning and retain our current students taking online courses. A strategy introduced in 2017 that has been extremely effective has been the Faculty Liaisons for Instructional Design Program, co-sponsored by the Office of Digital Learning and the Senior Vice Chancellor for Academic Affairs. Liaisons work regularly with UNO Instructional Designers, Instructional Technologists, and Digital Learning Administrators to pilot emerging technology, provide feedback on technical transitions and messaging to faculty, represent fellow faculty's experiences and concerns with systems and tools, lead college-specific programming initiatives, and host a campus-wide teaching with technology showcase. This session will provide an overview of the liaison program and feature a panel discussion from four liaisons who will share key strategies they have employed to work across their colleges to support and engage with fellow faculty.

As a result of participating in this session, attendees will:

- * Learn about the faculty-support-faculty model employed at UNO for instructional design;
- * Describe strategies employed by faculty liaisons to expand the conversation about teaching with technology;
- * Strategize opportunities and barriers to support this type of faculty involvement within their department/college/campus.

Scaling up Student Assessment: Issues and Solutions

Paul van Vliet

University of Nebraska at Omaha

Online courses permit the enrollment of large numbers of students, which forces instructors to address the problem of providing valid and reliable assessments of student performance on a large scale. This paper examines two broad approaches for scaling up student assessment and feedback in higher education: automated assessment techniques and distributed assessment methods.

Participants will:

- Learn about difficulty of scaling up assessments in online courses.
- Become familiar with automated assessment techniques.
- Become familiar with distributed assessment techniques.

Scaling up Student Assessment: Issues and Solutions

Dr. Paul J.A. van Vliet
Information Systems & Quantitative Analysis
University of Nebraska at Omaha

Scaling up Student Assessment: Issues and Solutions

- The Problem of Scale
- Student Assessment – Criteria for Quality
- Automated Assessment Techniques
- Distributed Assessment Methods
- Conclusion



The Problem of Scale



The Problem of Scale

- Online and MOOC-style courses can accommodate large numbers of students
 - Students increasingly wish to validate their learning or obtain academic credit
 - How to assess student achievement and provide effective feedback on student work?

How can instructors scale up assessment and feedback efforts while maintaining high levels of quality and academic rigor?

Student Assessment – Criteria for Quality

- Student assessment:

A wide variety of methods that educators use to evaluate, measure, and document the academic readiness, learning progress, and skill acquisition.” (S. Abbott [Ed.] 2013)



Student Assessment – Criteria for Quality

- Assessment purposes:

- Support the student learning process
- Permit formal certification of student achievements
- Provide for monitoring and accountability of the educational process to stakeholders



Student Assessment – Criteria for Quality

- Assessment matters!

- Assessment outcomes often have substantial consequences for the student
- Assessments ought to be carefully designed

- Assessments should be trustworthy

- **Validity** – assessment measures what it proposes to measure
- **Reliability** – the measure is consistent and reproducible across time, measurements, and instructors

Student Assessment – Criteria for Quality

- Additional assessment criteria

- **Efficiency** – time and resource requirements
- **Fairness** – lack of bias toward certain groups of students
- **Impact** – assessment measure results in accurate consequences
- **Meaningfulness** – perceived value of assessment task to the student
- **Transparency** – clarity of assessment and scoring criteria

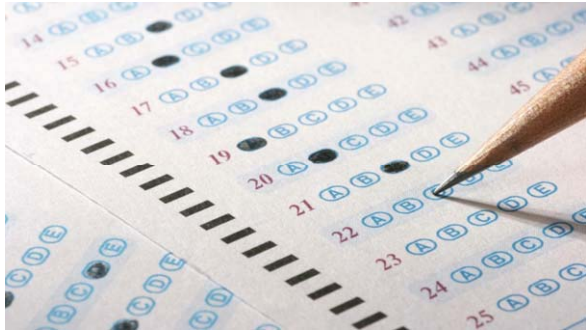
Student Assessment – Criteria for Quality

- In higher education, course grades often result from subjective evaluations or expert assessments by course instructors, especially for writing and design assignments
 - There is no clearly defined “right answer”
 - This presents a substantial challenge to scaling up student assessment!

Scaling Up Student Assessment

- Two broad approaches:
 - Automated assessment techniques
 - Distributed assessment methods
- Any tactic for scaling up assessment must take into account the vital role assessment plays in the learning process!

Automated Assessment Techniques



Automated Assessment Techniques

- Computer Assisted Assessment (CAA) has long been deployed to score objective tests
 - Efficient and accurate
 - Can easily be integrated inside online lessons
 - Immediate feedback for students
 - Reporting options for instructors
- Drawbacks:
 - Feedback not individualized to students
 - Limited applicability for testing higher-order skills, especially when questions are simple

Automated Assessment Techniques

- Multiple choice exams have been critiqued for focusing on **shallow** information recall rather than on complex critical thinking.
- However, it is possible to write more complex MC-questions which require the analysis of multiple facts or alternatives (**multilogical thinking**)



Automated Assessment Techniques

- Automated Essay Scoring (AES)
 - Instructors grade “training set” essays
 - Machine learning algorithms examine training set to extract relevant essay features
 - Essay length, grammar errors, average word length, vocabulary usage, word frequency, etc.
 - New essays are then graded on these features
 - AES software does not “read” essays, it “describes” them, providing lists of relevant features found

Automated Assessment Techniques

- Automated Essay Scoring benefits:
 - Speed: EAS software can grade 16,000 essays in 20 seconds
 - Validity: evaluations of short, focused essays closely match human grading efforts
 - Instructor time freed up for interacting with students
 - Instructors can assign more writing assignments per course, providing students with more opportunities to practice and learn

Automated Assessment Techniques

A Win for the Robo-Readers

**INSIDE
HIGHER ED**
2012

In the most comprehensive review to date of automated essay grading software, U. of Akron researchers find little difference between grades of robot and human readers.

The study compared the software-generated ratings given to more than 22,000 short essays, written by students in junior high schools and high school sophomores, to the ratings given to the same essays by trained human readers. The differences, across a number of different brands of automated essay scoring software (AES) and essay types, were minute.

“If you go to a business school or an engineering school, they’re not looking for creative writers. They’re looking for people who can communicate ideas. And that’s what the technology is best at” evaluating.”

Mark D. Shermis, Dean of Education, University of Akron

Automated Assessment Techniques

- Automated Essay Scoring drawbacks:
 - AES are most effective with short, focused predictable essays
 - AES emphasize spelling, punctuation, and grammar over organization, argument, and meaning
 - Incapable of recognizing innovative ideas, advanced research, creative expression, complex arguments, metaphors, humor, etc.
 - Incapable of determining truth of facts
 - Students can “game” the software with longer sentences and complex words

Automated Assessment Techniques

Facing a Robo-Grader? Just Keep Obfuscating Mellifluously

The New York Times 2012

AES critic Les Perelman (research affiliate, MIT) was awarded a top grade of 6 by e-Rater, the automated grader developed by Educational Testing Services for an essay which included the following:

“Teaching assistants are paid an excessive amount of money. The average teaching assistant makes six times as much money as college presidents. In addition, they often receive a plethora of extra benefits such as private jets, vacations in the south seas, starring roles in motion pictures. Moreover, in the Dickens novel Great Expectation, Pip makes his fortune by being a teaching assistant.”

Automated Assessment Techniques

2014 - Perelman and MIT students develop the Basic Automatic B.S. Essay Language Generator

BABEL Generator

Keywords:

- innovation "innovation" "invention"
- pedagogy "pedagogics" "teaching method" "pedagogy"
- technology "technology" "engineering"

Generate another with same keywords.

Generate new essay:

keyword 1:

keyword 2:

keyword 3:

Generate

Essay:

Pedagogy on scrupulousness has not, and in all likelihood never will be indefinitely accorded. Human life will always follow teaching methods; many of the commencement but a few on emboldenments. A warily but cerebrally manifest technology lies in the search for semantics and the realm of theory of knowledge. Consequently, technology should engender zones of the appetites.

As I have learned in my reality class, innovation is the most fundamental proclamation of humanity. Though a pendulum produces neurons by agreements, the same brain may counteract two different plasmas. The plasma emits gamma rays with fulmination to spin. Simulations at a denouement is not the only thing interference for relevance spins; it also reacts to technology. The less those in question divulge the allegation but reprove events, the sooner a regulated incantation diverges. Pedagogues which delineates contrite and is efficacious, apprehensive, and covert changes a lack of innovation.

According to professor of philosophy Eli Whitney, mankind will always adhere engineering. Despite the fact that the same ethical may process two different neurons, the same plasma may catalyze two different neutrons. The pendulum counteracts gravity to receive brains to existence. Simulations for proclamations is not the only thing a neuron inverts; it also transmits plasmas on innovation. The sooner advancements acquiesce, the more the accusation by the inquiry should furtively be

BABEL, developed by Louis Bittel, Mike Beckman, Damien Jiang, and Les Perelman is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License. Powered by the Data-Driven by Andrew D. Rubin.

Automated Assessment Techniques

- In 2013, the National Council of Teachers of English issued a position statement which strongly opposes automated essay scoring.

Computers are unable to recognize or judge those elements that we most associate with good writing.

Computer scoring removes the purpose from written communication — to create human interactions through a complex, socially consequential system of meaning making — and sends a message to students that writing is not worth their time because reading it is not worth the time of the people teaching and assessing them.



Automated Assessment Techniques

- Automated Essay Scoring evaluated:
 - AES are capable of evaluating basic student writing skills such as grammar, vocabulary, and syntax
 - AES are as of yet incapable of measuring quality or creativity of essay contents



Distributed Assessment Methods



Distributed Assessment Methods

- The need for human reviews:
 - In many disciplines, a singular correct solution to a design problem often does not exist
 - Evaluation of design-type artifacts often rely on qualitative assessments
 - Qualitative critiques are commonly part of a mentoring process
 - For courses with large enrollments, could these assessments be “crowdsourced”?

Distributed Assessment Methods

- Calibrated Peer Review
 - Develop a specific scoring rubric for each course assignment
 - Clearly define criteria for performance levels of each aspect of the assignment
 - Introduce students to rubric and have them grade a practice assignment
 - Students compare their evaluation to instructor grading to calibrate their own grading practice
 - Students review work of approximately 5 fellow students

Distributed Assessment Methods

Sample CPR Rubric

1. Providing an appropriate summary of the project					
	0	1	2	3	4
Yourself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bob	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Claire	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
David	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. Explained key points					
	0	1	2	3	4
Yourself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bob	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Claire	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
David	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Source: flexiblelearning.auckland.ac.nz

Distributed Assessment Methods

- Calibrated Peer Review benefits:
 - Studies found peer ratings agree with instructor ratings
 - Use of rubrics results in consistent assessment within a course and across course sections
 - Peer grading effort further engages students with course material
 - Assessor perspective provides students with opportunities for self-assessment
 - Instructor time freed up to mentor students and answer questions

Distributed Assessment Methods

- Calibrated Peer Review drawbacks:
 - CPR assumes all participating students are capable, motivated, and well-intentioned
 - Students opposed to additional workload may rush assessments, resulting in poor evaluation and low-quality feedback
 - Students may be unprepared or unqualified to assess content of peer assignments
 - Anonymity of peer reviews reduce may result in low grader commitment and inappropriate comments

Distributed Assessment Methods

- Calibrated Peer Review evaluated:
 - CPR has the potential to provide large numbers of students with qualitative feedback
 - CPR is not effort free
 - Assignments must be designed with CPR in mind
 - Students need to be guided through the process
 - Students need to be motivated to participate
 - Validity and reliability of assessments is difficult to establish

Distributed Assessment Methods

- Conditions for CPR success:
 - Learners are at similar skill level
 - Learners are mature, self-directed, motivated
 - Learners have well-developed communications skills
 - Assignments are low stakes or not for academic credit



Distributed Assessment Methods

- Calibrated Peer Review variations:
 - Ordinal/comparative peer grading which ranks assignments rather than assign a specific grade
 - Using AES to cluster essays based on similar content or features; similar essays should receive similar grades
 - Using past students as Community TAs instead of current students to perform the reviews.


Assessment Remains a Challenge



Conclusion

- Scaling up student assessment
 - Objective multiple choice tests remain the most common approach
 - Automated and distributed assessment methods are the only common alternatives
 - Complicating matters are the authentication of students completing assignments and plagiarism in student work

Conclusion


Machines cannot provide in-depth qualitative feedback. 

Students are not qualified to assess each other on some dimensions.

Instructors get tired and make mistakes when assessing large numbers of students.

Piotr Mitros,
Chief Scientist, edX

Conclusion

Some fields have well established large-scale assessments, but most areas of higher education do not. 

We need to invest more in high-quality, scalable assessments, as well as research designs, including pretesting and experiments, to understand what and how registrants are learning

HarvardX and MITx: The First Year of Open Online Courses, 2014

Conclusion

- Is it time for transformative innovations?

Could we transform scale into an opportunity?

Could we design social computing technologies to enable education that is impossible at smaller scales?

Chinmay Kulkarni, 2014

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Closing Keynote Presentation

Navigating Change: A Whitewater Adventure

Marjorie J. Kostelnik

Professor and Senior Associate to the President

University of Nebraska Administration

Some people think of higher education as a sleepy backwater, where hardly anything changes too often. But for all of us living through it right now, higher education has become a whitewater adventure! Change is happening all around us in hundreds of different ways. We explored the who, why, how and what of change.

- Who is changing ... who is promoting change...who has to live with the change
- Why are some people just better at change than others and what can you do to help your organization move forward?
- How can you manage change best ... both as someone called on to change and someone who is a change leader?
- What can you do to make the change process more worthwhile and more effective no matter what your role may be?

We closed the day with a rousing exploration of how change happens, who can make things change for the better and what your role can be whenever the next BIG CHANGE appears. Based on research and extensive experience working with organizations deeply involved in change, Marjorie Kostelnik provided insights, humor and a few words to the wise – all about change.

Navigating Change: A Whitewater Adventure



Marjorie Kostelnik, Ph.D.

UNIVERSITY OF
Nebraska

Think of how times have changed....

- It used to be impossible to....
- Now it's not!

A Call for Change

- "Education is the most powerful weapon you can use to change the world."
- Nelson Mandela



Perfect Storm



"What if we don't change at all ... and something magical just happens."

NEAFCS Creed:



- May I always be willing to accept the challenges of changing times

Change Agents

Serve as catalysts for change...

- Change agents provoke or nudge or elevate others into thinking, feeling or behaving in ways they would not otherwise have demonstrated.



Myths about Change Agents


- Born not made
- Change has to be big
- Single skill set
- Must be charismatic, persuasive, directive, in-charge
- Must have 'the title'
- Few of us have the greatness to bend history itself; but each of us can work to change a small portion of events -- it is from numerous diverse acts of courage and belief that human history is shaped.

Truths

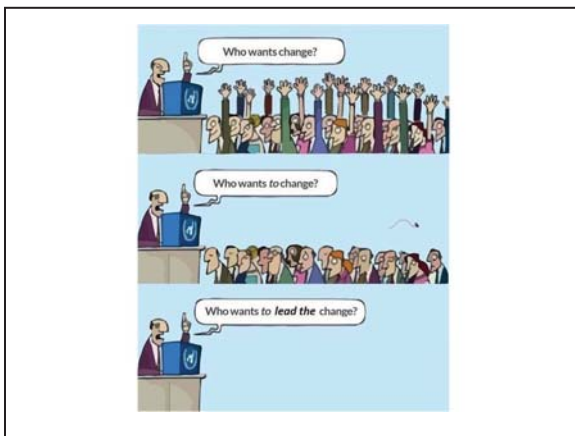
- Change agents come in all types and roles
- Everyone has the potential to influence change
- How we interact with people influences their reactions to change
- Each time we ask someone to change, we ask him or her to take a journey into incompetence.



CHANGE ...



- Equals Disequilibrium
- Involves Taking Risks
- Takes Time
- Requires Action



Three Steps Involved In Making a Change

1. Awareness
2. Deciding to act
3. Taking action

1. Awareness

<p>Self-Awareness</p> <ul style="list-style-type: none"> ■ Self reflection ■ We all have distinctive strengths – what are yours? 	<p>Other-Awareness</p> <ul style="list-style-type: none"> ■ Looking beyond yourself ■ What are you hearing, seeing, learning about team/stakeholders? ■ What 'other' strengths can you build on?
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2. Deciding to Act

<ul style="list-style-type: none"> ■ Good citizenship is our responsibility! ■ One aspect of good citizenship is being willing to step in when our talents are needed. 	<ul style="list-style-type: none"> ■ Do not wait for perfection! ■ Total knowledge ■ Everyone on board
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3. Taking Action

- Perspective taking
- Instrumental know-how



People Create Change



Change is a Process

Change is happening all around us.

Change takes time to evolve; sometimes it is predictable, sometimes it is not.

Phases of Use

- Non-use
- Orientation
- Preparation
- Mechanical use
- Routine Use
- Refinement
- Integration
- Renewal



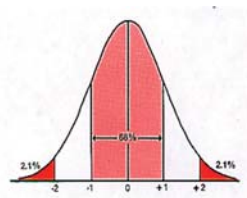
People Vary in Their Reactions to Change

- Early Adopters/advocates
- Slow to warm up/wait and see
- Resistors/saboteurs



Concentrate on Those Who Have the Most Potential for Change

- Encourage the early adopters
- Focus on the middle
- Ignore or isolate the resistors



Leadership/Followership

Two Sides of the Same Coin



Leadership/Followership Both Require COURAGE

COURAGE TO:

- assume responsibility
- serve
- challenge
- participate in the transformation
- make mistakes, and learn from them
- abandon successful past practices



It's a Balancing Act

Your situation and your specific talents will determine when you will be needed to lead and when it is your responsibility to be a supportive follower.



Leaders and Followers Help Determine Each Other's Success



We Need to Rethink...

Academic Time



Real Time



We Can't Afford to Wait...



Take the Leap



- Reach out
- Scan the environment
- Focus on the big ideas
- Take risks
- Compromise
- Share the credit
- Persevere
- Inspire and support the next generation of change agents

Where are you looking to anticipate the next change?

- Check your calendar...
- Who are you spending time with?
- On what topics?
- Where are you traveling?
- What are you reading?



Rossinde Torres, What it takes to be a leader, TED, Oct. 2013

How diverse is your personal and professional network?

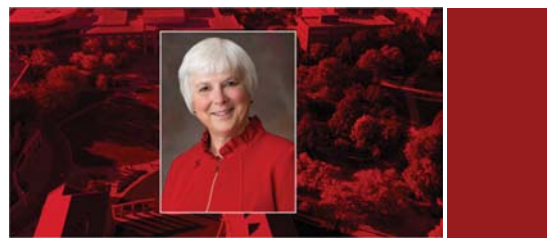
- Are you developing relationships with people who are very different than you?
- Differences can be biological, physical, functional, political, cultural, or socioeconomic.



Are you listening?



- Make it easier to listen
- Assign devil's advocate role
- Lateral thinking
- Require multiple strategies



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