Designing with Mobile in Mind

1 51

Sue Bauer, Amy Sugar, and Kevin Yee





Today's Presenters



Sue Bauer Instructional Designer/CDL

Amy Sugar Instructional Designer/CDL

Kevin Yee Director/FCTL





UCF Mobile

- UCF Mobile Surveys
- UCF Mobile Data
 - UCF Mobile Device Ownership
 - UCF Mobile Device Usage
 - Canvas App Usage
 - UCF Webcourses@UCF (Canvas) App Usage
 - Canvas Instructure Mobile App Usage
- What does it mean?

UCF Mobile Survey Reports



• <u>UCF Mobile Survey Reports</u> completed in 2012, 2014, 2016, and 2018

- UCF Mobile Survey completed in 2019 and 2021. A report has not been published.
- Administered surveys at UCF (Webcourses@UCF/Qualtrics) by the Center for Distributed Learning's Mobile Group

Mobile @UCF: Smartphone Ownership

99.7%

Own a smart phone

N= 1145 2021 Mobile Survey



Image source: https://www.istockphoto.com/photo/mobile-phones-background-pile-of-different-modern-smartphones-gm531063083-55054412

Mobile @UCF: Smartphone Ownership

3 respondents

Reported they do not own a smart phone.

N= 1145 2021 Mobile Survey







Mobile@UCF: Smartphone Device



84% iPhone



16% Android

N= 1145

2021 Mobile Survey

Which mobile devices do you own?



N=4,135 2018 Mobile Survey Report

Mobile Stats - Usage

Usage

- **99%** of UCF students use **desktop/laptop** for learning at least once a week
- 81% of UCF students use smartphones for learning at least once a week

N= 1145

2021 Mobile Survey

September 2022 Snapshot App and Brower Usage (September 12 – 18, 2022)

> iOS: 93% Android: 7%

Breakdown

- Apple (92.8%)
- Samsung (4.4%)
- Google (0.64%)
- Motorola (0.39%)
- Xiaomi (0.28%)
- OnePlus (0.28%)

Mobile Stats - Usage



Webcourses@UCF App (Canvas Mobile App)

Have you used the Webcourses@UCF Mobile App?

- 1016 Yes
- 69 No
- 17 Unsure
- 18 Not familiar with app

N=1120 Survey 2021

Mobile Stats – Usage: Frequency



Webcourses@UCF App (Canvas Mobile App)

N=1688

Do you use the Canvas Mobile App?



Mobile Stats – Usage: Pandemic Usage



Webcourses@UCF App (Canvas Mobile App) Analytics



~20% of all Webcourses@UCF traffic



~60k unique monthly users Fall 2020



STUDENT

Mobile Stats - Usage

Rated as Important Webcourses@UCF App Features (Canvas Mobile App)

- Grades
- Assignment Details
- Quiz Details
- Announcements
- To Do Items
- Course Content (Pages/Modules)
- Inbox



Canvas Mobile Stats - Usage

Instructure Canvas Mobile App

Who's using the Canvas app

- 43% of faculty
- 87% of students

• Teachers' favorite features

- Announcements
- Inbox
- Calendar

• Students' favorite features

- Grades
- Assignments
- Announcements

Canvas Team 2020: Mobile Learning. To the Power of Canvas.

What does the data mean?





UCF students use mobile device to access their courses through Webcourses@UCF



Tools and Content need to be accessible to UCF students (mobile)

What Could Go Wrong?



Materia

4:32 		. II 🗢 🗖
〈 Back	Home Example Course	

Example of Materia (Flash Cards widget):



Word Wrap





"Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum."



WCAG 2.0 – Formatting and ALT text

TRUNCATION THE THE THE PARTY OF A TANK OF THE

THI

D

Page Title	
Faculty Life	
Edit View Insert Format Tools Table $18pt \lor Heading 3 \lor B I \sqcup A \lor \checkmark T^2 \lor $	
 colleges Heading 2 signs are likely to focus heavily publi Heading 3 two- Heading 4 	on teaching. There are numerous variations on this spectrum, which may be influenced by:
unde Preformatted control of undergraduate and graduate	te La
Even theerent at the college/school/de	epartment levels.
Teaching	
h3 → span → span → strong	iii () 866 words ∠ ii
NAVORANNE SANANANANANANANANANANANANANANANANANANAN	
HOUT FREEDOM OF THOUGHT CAN BE NO SUCH THING AS WISDOM SUCH THING AS PUBLICK LIBERTY	<pre> <pre> <cl> </cl></pre> </pre>
HOUT FREEDOM OF SPEECH BENJAMIN FRANKLIN 1722	<pre> <pre> %nbsp; </pre></pre>

Death by Scrolling

2:29 ⊕ 0 0 ⊕ • 😣 ♥⊿ 860%

E

← Course Design Strategies

with invisible disabilities (e.g., ADTD,

Dyslexia). Chunking provides several benefits, including the following; reduces cognitive load, supports information recall and retention, improves readability [meaning it is easier for students to read and interact with content on any device (laptop or mobile)], improves search-ability (meaning it is easier for students to search for and locate information). You began applying chunking at the course level when you created your course map and decided how you will organize and sequence your course topics, activities, and assessments. Additional examples of chunking at the course level include: Break up a long lectures into smaller segments and record mini-lectures, take a challenging topic and organize it into smaller sub-topics that may be spread across multiple pages or modules in your course, scaffold a discussion, essay, or project by breaking it down into smaller tasks for students to complete. Chunking at the module level involves deciding how you will organize and present content, activities, and assessments in each module. Consider how you will guide students through the readings, activities, and assessments. When chunking



PDFs



Actively Engaging Students in Asynchronous Online Classes IDEA Paper #64 • December 2016



Shannon A. Riggs and Kathryn E. Linder . Oregon State University Ecampus

Active learning activities and pedagogical strategies can look different in online learning environments particularly in asynchronous courses when students are not interacting with the instructor, or with each other, in real time. This paper suggests a three-pronged approach for conceptualizing active learning in the online asynchronous class: the creation of an architecture of engagement in the online classroom, the use of web-based tools in addition to the learning management system, and a re-imagining of discussion boards as interactive spaces. The adoption of these approaches invites meaningful action and reflection to create truly active learning activities in online asynchronous

Active learning pedagogies have become widely accepted in face-to-face teaching as a method of engiging students in their learning and as a way to encourage metacognition and reflection. Whereas traditional lecture/warm pedagogies are teacher centred, with the instructor as the focal point, active learning spices the student at the center of the learning experimenc. In addition to being student centered, tented are control to being student centered, the student centered. tearning experience. In addition to being student-centered, active learning experiences generally have two additional components: they require (1) meaningful action by the student on behalf of their learning and (2) that meaningful action be paired with reflection by the student regarding their learning experience. Prince (2004) and Michael (2006) have both synthesized research-based evidence that active learning techniques are successfully helping students learn.

Given its popularity, it is important to also consider active Given is popularity. It is important to also consider active indicases, which mechanisms and the source of the antimeter of suderts learning in online active learning management system, and suderts learning in online active learning management system, and suderts learning in online active learning management system, and suderts learning system sys environment, to be sure, the growth in online coulties a user automatic call learn in the balan ways that must be here noded. Unfortunately, despite decided or growing experiences and the expertise in distances with the experison from facily about the quality of education that is reading the education, there is a site decided in the experiment inter (Ader, Seman, Noule, & Starter, 2005), Perceptions of the factor of the experiment of the experiment of the factor of the experiment of the experiment of the factor of the experiment of the experiment of the factor of the experiment of the experiment of the factor of the experiment of the experiment of the factor of the experiment of the experiment of the factor of the experiment of the experiment of the factor of the experiment of the factor of the experiment of the experiment of the factor of the experiment of the experiment of the factor of the experiment of the experiment of the experiment of the factor of the experiment of the experiment of the factor of the experiment of the experiment of the experiment of the factor of the experiment of the

In this paper, we suggest that well-established fundamentals of online course design and facilitation still need to reach and be accepted by a broader audience within higher education, and that lingering perceptions about quality differences between face-to drae and online education signify a professional development gap-one that can be because all training should active because and signify a professional development gap-one that can be bridged with training about active learning pedagogy and models for active learning in online asynchronous classes. Importantly, active learning activities and pedagogical strategies can look different in online learning environments, and some instructors can find incorporating active learning to be challenging, particularly in asynchronous courses. when students are not interacting with the instructor, or with each other, in real time. This paper suggests a three pronged approach for conceptualizing active learning in the online asynchronous class: the creation of an architecture of

assumptions that instructors are to accession based in solving and think pair-share activities, among dome nable subrems, and to encourage more active learning, in fore-to-face environments. a question. Students are then asked to reflect about the



2:18 🛞 🖥 🖥 👘 🔸 📴 💎 🏑 🔒 62% .

Actively Engaging S Asynchronous Onlin

IDEA Paper #64 • Decem

Shannon A. Riggs and Kathry

Abstract

Active learning activities and pedagogical particularly in asynchronous courses wh each other, in real time. This paper sug learning in the online asynchronous cla online classroom, the use of web-based re-imagining of discussion boards as int meaningful action and reflection to cre classes.

re learning pedagogies have become widely accept ce-to-face teaching as a method of engaging stuc eir learning and as a way to encourage metacogn shoet on an and local linest or cooking with

Directions



11:19		<u> </u>
C Back	Assignment Details Mobile Test ENC6217 (Teacher)	
Submiss	ion Types	
File Uplo	ad	
Cubmico	ion & Rubric	>

Icons are defined as individuals who are idolized by their fans. Not only are icons idolized, but they also timeless. Iconic individuals are indicative of their era. In other words, when an era is mentioned, the icons of the era are the first individuals to come to mind. The 80's produced plenty of musical icons.

The Assignment

Your assignment is to submit an image of an iconic music star from the the 80's. The image must portray the musician on stage, in action, with their instrument. In order to get full credit, all three criteria must be met.

Please use the **Submit** Assignment button above to submit the

Calendar

Dashboard

assignment.

ĭΞ

To Do

Notifications

 \square

Inbox

Delay in loading high quality images and videos



Tables

Using tables to format and organize a lot of text-based content

4:13 ⊕ № 2 2 + 89 ♥⊿ 955%

Using Tables for Layout

NCS	Category 1	Category 2	Category 3	Cateç
	"Lorem	"Lorem	"Lorem	"Lore
	ipsum dolor	ipsum dolor	ipsum dolor	ipsun.
	sit amet,	sit amet,	sit amet,	sit an
	consectetur	consectetur	consectetur	consi
	adipiscing	adipiscing	adipiscing	adipi:
ales.	elit, sed do	elit, sed do	elit, sed do	elit, s
NG	eiusmod	eiusmod	eiusmod	eiusn
	tempor	tempor	tempor	temp
	incididunt	incididunt	incididunt	incidi
	ut labore et	ut labore et	ut labore et	ut lab
	dolore	dolore	dolore	dolor
	magna	magna	magna	magr
	aliqua."	aliqua."	aliqua."	aliqu
	"Lorem	"Lorem	"Lorem	"Lore
	ipsum dolor	ipsum dolor	ipsum dolor	ipsun
	sit amet,	sit amet,	sit amet,	sit an
	consectetur	consectetur	consectetur	consi
	adipiscing	adipiscin	adipiscing	adipi:
dire.	elit, sed do	elit, sed do	elit, sed do	elit, s
NC	eiusmod	eiusmod	eiusmod	eiusn
	tempor	tempor	tempor	temp
	incididunt	incididunt	incididunt	incidi
	ut labore et	ut labore et	ut labore et	ut lat
	dolore	dolore	dolore	dolor
	magna	magna	magna	magr
				4 Miles

Examples

C

Brainstorm Prevention



Handout

FCTL Teaching and Learning Day - September 20, 2022 Session: Designing with Mobile in Mind Presenters: Sue Bauer, Amy Sugar, and Kevin Yee

Do This Instead - Session Activity Part 1

Best Practices Resource Page/Mobile Accessibility Tips

Don't do this	Do this instead
Use Materia activities on a Canvas page with	
other critical material (Materia doesn't fit on a	
smartphone screen)	
Use align=left so words wrap around the right	
side, possibly broken into multiple lines per word	
Use bolding and font size to indicate headings for	
new sections	
Copy-paste images from Google without paying	
attention to options	
Type or paste very long text documents into a	
single Canvas page (it's a lot of scrolling!)	
Upload PDFs as your first choice (PDFs load in	
mobile devices with tiny font, and while	
pinch/zoom is possible, it's very hard to read that way)	
Refer to course navigation as if everyone is using	
a laptop or desktop computer	
Place a high-quality (and heavy/large) image or	
video, as this may pause while loading and look broken	
Define tables in pixels (such as for the class	
schedule), which may require scrolling on mobile devices	

FCTL Teaching and Learning Day - September 20, 2022 Session: Designing with Mobile in Mind Presenters: Sue Bauer, Amy Sugar, and Kevin Yee

Do This Instead - Session Activity Part 2

Best Practices Resource Page/Mobile Accessibility Tips

Don't do this	Do this instead
Use Materia activities on a Canvas page with other critical material (Materia doesn't fit on a smartphone screen)	Embed Materia activities on a standalone Canvas page, linked from the main page with more critical information (and telling students the Materia practice will not display on a phone)
Use align=left so words wrap around the right side, possibly broken into multiple lines per word	Always place images on their own line in a Canvas page (centered is usually best). Select the percentage option in "Image Options" to ensure images are responsive and adjust based on screen size.
Use bolding and font size to indicate headings for new sections	 Use font "style" (Heading 2, Paragraph, etc) to create headings, as these are screen-reader compliant
Copy-paste images from Google without paying attention to options	Always customize the ALT text for screen readers, as the default ALT text from Google is usually insufficient
Type or paste very long text documents into a single Canvas page (it's a lot of scrolling!)	Break up the text into sections, use headings, action icons, and add images. Also consider breaking the text into two or more pages, possibly with activities between them in the Canvas module
Upload PDFs as your first choice (PDFs load in mobile devices with tiny font, and while pinch/zoom is possible, it's very hard to read tha way)	When possible, paste instead into a Canvas page or use the document converter tool. If a PDF t must be used, caution students when linking to it that it should be viewed on a laptop or desktop computer
Refer to course navigation as if everyone is using a laptop or desktop computer	Because the app does not have side navigation and uses different terminology, use generic terms instead for where students should click
Place a high-quality (and heavy/large) image or video, as this may pause while loading and look broken Define tables in pixels (such as for the class	Resize images to a smaller size before uploading to Canvas. Link to or embed videos hosted on a streaming platform (e.g., YouTube) Define tables in HTML using percentages
schedule), which may require scrolling on mobile devices	i

Best Practices



Photo by Lisa Fotios: <u>Pexels</u>

Canvas Pages are Preferred Format













Chunking

- Chunk content at the course, module and page levels
- Consider using text headers in modules
- Apply Heading styles on pages
- Consider using action icons and other graphics to help chunk content

Chunking as a Design Strategy

One strategy to help you effectively organize and deliver your content effectively is by chunking the content. Chunking is the process of organizing content into smaller, bite-sized pieces to make it easier for learners to absorb the information. Chunking benefits all students, especially students using assistive technologies or mobile devices. Additionally, chunking may also help support students with invisible disabilities (e.g., ADHD, Dyslexia).

Benefits of Chunking

- Reduces cognitive load.
- Supports information recall and retention.
- Improves readability [meaning it is easier for students to read and interact with content on any device (laptop or mobile)].
- Improves search-ability (meaning it is

Examples

Mobile-friendly Media and Content











Review Your Course Using the Canvas App



80's Hard Rock and Heavy Metal



Hard Rock and Heavy Metal: The Party Begins

Beginning in 1983 and peaking in success in 1986-1991, the decade saw the resurgence of hard rock music and the emergence of its glam metal subgenre. Bands such as AC/DC, Queen, U2, Def



Courses

		¥ 🕩 💎 1	4:32
≡	Modules Dev_MOB7100_S	-	⋳



Hard Rock and Heavy Metal: The Party Begins

Beginning in 1983 and peaking in success in 1986-1991, the decade saw the resurgence of hard rock music and the emergence of its glam metal subgenre. Bands such as AC/DC, Queen, U2, Def Leppard, Mötley Crüe, Bon Jovi, Quiet Riot, Scorpions, Europe, Ratt, Twisted Sister, Poison, Whitesnake, and Cinderella were among the most popular acts of the decade. The 1980s saw the emergence of wildly popular hard rock band Guns N' Roses and the successful comebacks of Aerosmith and Alice Cooper in

Android

Identify Differences and Issues with Content on Canvas Mobile App

- How content displays
- Inaccessible content
 - Broken images
 - File types that won't open (or require an additional app)
- Canvas app does not rotate
- Indented text headers in modules do not work on Canvas Mobile

Inform Students







Resources

- Import Docx, PPT, or HTML Tool
 - Quickly convert your DOCX, PPTX, or HTML files into Webcourses@UCF Pages
- <u>Adding Action Icons in Webcourses@UCF</u>
- <u>Faculty Multimedia Center</u>
 - Create mobile friendly media for your course
- CDL Techranger Support (for IDL6543 certified faculty)
 - Course development support (e.g., help addressing formatting or html issues)



Reference List

Canvas Team 2020: Mobile Learning. To the Power of Canvas:

https://www.instructure.com/canvas/resources/all/mobile-learning-to-the-power-of-canvas

□ Canvas Teacher Mobile Use:

□ UCF Mobile Surveys and Reports:<u>UCF/CDL Mobile Surveys and Reports -</u> <u>https://digitallearning.ucf.edu/msi/research/mobile/survey2018/</u>



FCTL Teaching and Learning Day - September 20, 2022 Session: Designing with Mobile in Mind Presenters: Sue Bauer, Amy Sugar, and Kevin Yee

Do This Instead - Session Activity Part 2

Best Practices Resource Page/Mobile Accessibility Tips

Don't do this	Do this instead
Use Materia activities on a Canvas page with	Embed Materia activities on a standalone Canvas
other critical material (Materia doesn't fit on a	page, linked from the main page with more
smartphone screen)	critical information (and telling students the
	Aluque place images on their own line in a Conves
ose align=left so words wrap around the right	Always place images on their own line in a Canvas
side, possibly broken into multiple lines per word	page (centered is usually best). Select the
	images are responsive and adjust based on
	scroop size
Use holding and font size to indicate headings for	Use font "style" (Heading 2 Paragraph etc) to
new sections	create headings as these are screen-reader
	compliant
Copy-paste images from Google without paying	Always customize the ALT text for screen readers.
attention to options	as the default ALT text from Google is usually
	insufficient ,
Type or paste very long text documents into a	Break up the text into sections, use headings,
single Canvas page (it's a lot of scrolling!)	action icons, and add images. Also consider
	breaking the text into two or more pages,
	possibly with activities between them in the
	Canvas module
Upload PDFs as your first choice (PDFs load in	When possible, paste instead into a Canvas page
mobile devices with tiny font, and while	or use the document converter tool. If a PDF
pinch/zoom is possible, it's very hard to read that	must be used, caution students when linking to it
way)	that it should be viewed on a laptop or desktop
	computer
Refer to course navigation as if everyone is using	Because the app does not have side navigation
a laptop or desktop computer	and uses different terminology, use generic terms
	instead for where students should click
Place a high-quality (and heavy/large) image or	Resize images to a smaller size before uploading
video, as this may pause while loading and look	to Canvas. Link to or embed videos nosted on a
broken Define tekles in nivels (such as fan the slass	streaming platform (e.g., You lube)
Define tables in pixels (such as for the class	Define tables in HTIVIL using percentages
devices	
devices	