DR. ALLEGRA W. SMITH



DESIGN, ACCESS, AND EQUITY

research and teaching philosophies



DR. ALLEGRA W. SMITH

- BA Professional Writing, Gender Studies, Michigan State University
- MA, Digital Rhetoric & Professional Writing, Michigan State University
- PhD, Rhetoric & Composition, Purdue University

Teacher, researcher, advocate in professional writing and the design of communication

AARP Tax-Aide **volunteer** invested in community engagement for older adults and intergenerational learning

TEACHER, RESEARCHER, ADMINISTRATOR







TEACHER

Technical & professional writing; multimodal composing; nonprofit advocacy communication

RESEARCHER

User experience (UX); (accessible) design of communication; online writing instruction & curriculum; age studies

ADMINISTRATOR

Online & F2F writing programs; curriculum development & design; teaching of teachers; building capacity & sustainability



RESEARCHER Which big questions inform my work? How do I answer them?

MY RESEARCH AGENDA

PEOPLE, TECHNOLOGY, COMMUNICATION

How do intersecting facets of our identities mediate our experiences with technology? How does that in turn influence our communication?

INTEGRATED THREE-PART APPROACH

Design (UX) Documentation Education



MY RESEARCH COMBINES



TECHNICAL & PROFESSIONAL WRITING



USER EXPERIENCE DESIGN



AGE STUDIES / LIFE COURSE WRITING



FEMINIST RESEARCH METHODOLOGY

DISSERTATION EXIGENCY



A CHANGING POPULATION PYRAMID... Older adults are expected to outnumber children by 2035. Last year, over one billion senior citizens were alive on the planet. **...BUT AN UNCHANGED RESEARCH LANDSCAPE?** Technical and professional communication (TPC) research overwhelmingly focuses on school and work (despite a 2004 call to attend to aging!)



RESEARCH QUESTIONS

- 1. What does "everyday" computer and internet use look like for older adults living in a residential senior community?
- What are the goals and purposes for technology usage articulated by older adults in this community? What motivations shape these?
- 3. What factors (material, infrastructural, embodied, cognitive, cultural, design, etc.) help or hinder older adults from realizing their technological goals?

4: WHAT RECOMMENDATIONS can be generated for a more inclusive experience architecture?

(given this age cohort's experiences with and reflections on technology)

METHODS

1: SEMI-STRUCTURED INTERVIEWS

Answering questions about computing skills, learning, problems (15 participants, 7–30 minutes)

2: NATURALISTIC (UNSTRUCTURED) OBSERVATIONS

Walking through "everyday" computer use while "thinking aloud" (7 participants, 10–40 minutes)

3. STRUCTURED TASK ANALYSES

Completing a series of tasks to identify pain points (6 participants, 15–45 minutes)





RESEARCH SITE

- The Villages, a central Florida retirement community
 - The United States' fastest growing city
- Population has doubled since 2010
 - 51,000 to 114,000 residents
- Median community age of 67.4
 - Research sample median age was 82.2
- Interviews and observations conducted in an independent living apartment facility

ILLUSTRATING RESULTS

through participant Holly's structured task user experience

SEARCH STRATEGY

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HOLLY'S USER JOURNEY

- Click first result
 - [AD] Tax Deductible Medical Expenses |
 Search & Find Quick Results
- Sponsored results appear
 - For the same query on a different site, Information Vine (potentially dangerous paid search provider)
- Scan results, select first option
 - [AD] Medical Expense Tax Deductions Find Your Answer Today
- New search results appear
 - Advertisement links to ask.com's results for

the same query; lather, rinse, repeat

HOLLY'S USER JOURNEY

Information Vine

deduct medical expenses from taxes driving to doctors appointments

Q

Did you mean: deduct medical expenses from taxes driving to doctor's appointments ? REL

Need A Doctor In Your Area? - Request An Appointment

Ad · www.ahn.org/ ·

Save Time By Requesting In-Network Doctors Near You in Three Easy Steps. Online Bill Paying.

Find A Doctor Browse Our Network Of More Than

7.000 Health Care Professionals.

Specialties & Services Browse Our Specialties & Services Library To Find The Care You Need.

TurboTax® Official Site - File Your Taxes for Free

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File Free or Connect with Experienced **Tax** CPAs Online. Also Available Nights and Weekends. Free **Tax** Calculators. Maximum Refund Guarantee. No **Tax** Knowledge Required. Maximize Your **Deductions**. Free Edition. File **Tax** Forms Online. Audit Support. Free Online Support. Types: Free Edition, Premier Edition, Online Products, Mobile Products, Military Discount, Deluxe Edition.

Free Tax Calculator Easily Import Your W-2 Import 2017 Tax Data E-File Your Taxes Today

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Tax Deductible Expenses List Of Tax Deductibles

SEARCHES

Tax Deductible Medical Expenses Tax Deductible Medical Expense Question

RELATED SEARCH

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IMPLICATIONS

- 1. <u>Revalue</u> older adults' technology engagement as literate activity
- 2. <u>Intervene</u> through design, documentation, and instruction
- **3.** <u>**Give back**</u> to older adults in our regions and communities
- 4. <u>Incorporate</u> age and aging into the technology design process, considering users different from ourselves

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CONSIDERATIONS SHAPING OLDER ADULTS' UX



EMBODIED/MATERIAL

Optical and visual, auditory, motor skills and control, dexterity and flexibility, mobility



COGNITIVE/PSYCH

Cognition, mental flexibility, sorting and filtering (Universal Design)



EDUCATIONAL

When/where users learned tech skills (or didn't!), literacy sponsors, documentation and help



CULTURAL / GENERATIONAL

"curriculum of aging" (Bowen), generational logics, norms, language and identification, assumptions about a target user

CULTURAL/GENERATIONAL

your

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Security Questio	ons.
Select three security of identity should you for	questions below. These questions will help us verify rget your password.
Security Question	What was the name of your first pet?
Answer	
Security Question	What is your dream job?
Answer	
Security Question	In what city did your parents meet?

Answer



LANGUAGE & IDENTIFICATION







INDEFINITE ARTICLES Allegra: 9 (30%)

Participants: 52 (75%)

POSSESSIVE DETERMINERS

Allegra: 21 (70%) Participants: 17 (75%)

MEANING?

Obtrusiveness is a key factor shaping technology perceptions and adoption for older adults!

RESEARCH AGENDA

SEARCH / INFO LITERACY

Article in *Technical Communication* (for scholars and practitioners) on glocalizing through age

STUDENT UX & USER JOURNEYS

Applying UX frameworks to academic programs and services; TPC program and curriculum development

RHETORIC OF HEALTH & MEDICINE

Patient experience design (PxD) interventions made by older adults

SOCIAL ENTERPRISE

Case study on business / professional writing class grounded in social justice

PROGRAM & CURRICULAR DESIGN



Applying methods and frameworks like the UX honeycomb (Morville) to the design of academic programs, services, experiences, and supports by prioritizing user narratives and journeys



TEACHER What do I teach? How do my values inform my teaching?

MY

TEACHING



VALUES

NETWORKED EXPERTISE AUTONOMY & SELF-DIRECTION PRACTICE THROUGH PLAY

BUT ALEGRA what does this even look like?

NETWORKED EXPERTISE

Students build an archive of resources through learner-led presentations throughout the semester

Group Google Docs enable collective knowledge construction and remove barriers to classroom participation

Online and F2F students are **subject matter experts** in their disciplines and other skills; they consult each other with questions first before me

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- Do you hope to stay in this field, o another field?
- If you could change one thing abo

Team Slytherin

- · Did you attend univers
- What was your courses
 - university)?

AUTONOMY & SELF-DIRECTION

Developing students' ability to **pose their own questions** and design methods to seek answers to them

Making assignments applicable to disciplinary contexts through crafted scenarios and open-ended deliverables

Encouraging reflection and selfawareness of writing process: what conditions or resources do you need to produce your best work?



PRACTICE THROUGH PLAY

Building technology skills with both industry-standard software and free, open-source programs

Offering low-stakes opportunities to try out genres and tools first, before applying knowledge to public or client projects

Removing barriers to access by providing flexible deliverables and/or deadlines

MOON POTLUCK*

ALL OF THE FUN WITH 16% OF THE GRAVITY!



A SATELLITE DELIGHT!

January 1. 2018 · 8:00 PM MST (Moon Standard Time) 4242 Neil Armstrong Way. Sea of Tranquility *BYOO (Bring Your Own Oxygen)

BUILDING SCENARIOS





AERO/ASTRO ENGINEERING

Pitch an experiment under 200 pounds to be sent to the International Space Station for a relaunch of NASA's "Getaway Special" program

HEALTH & TECHNOLOGY

Reimagine Walt Disney World's onboarding and offboarding procedures for its attractions during COVID-19, to protect guests and cast members

AVIATION & MANAGEMENT

Respond to a billionaire investor's request for bids for personalized management and private charter services for his fleet of luxury aircraft

BUILDING CONNECTIONS



I am branching out into experiential learning, specifically service learning that connects students with local organizations in need.

- Building capacity
- Designing documents for professional portfolios
- Conducting on the ground research

EXAMPLES (STUDENTS IN MY CLASSES PRODUCE REALLY COOL WORK.)



The EARN-IT act is threatening our online privacy. What can you do about it?

What is Encryption?

Encryption is the process of turning data into a code that is only able to be read by the sender and the recipient. This prevents hackers and third parties from using this content to learn things like credit card numbers and other sensitive information.



What is Encryption?

This process also keeps data on your device protected from being read by someone else. When you unlock your phone, this decrypts the data stored on it. Currently, authorities cannot break this encryption*, and would have to take you to court. You can still withhold the information, but it might result in charges.



*police departments cannot force you to unlock a phone! This includes with fingerprints and face scanning.

What's the EARN-IT Act?

If you send something illegal online, the government cannot litigate the website for your actions. However, the EARN-IT act looks to change that. Websites would have to allow the government to view messages WITHOUT a warrant or probable cause. This would require letting them break the encryption. This is not only a violation of privacy, but also weakens all forms of internet communication to hackers.



What can you do?

- Contact your representatives

The Electronic Frontier Foundation (EFF) has an easy tool to contact your government reps.

https://act.eff.org/action/stop-the-earn-itbill-before-it-breaks-encryption

- Download Signal Messaging App

This app is based entirely around privacy. While twitter can be audited to show messages you have stored on their servers, Signal keeps everything between you and your friends.

https://www.signal.org/

The Modern Classroom



A PARENT'S GUIDE TO TECHNOLOGY IN SCHOOLS

Technology gets a bit of a bad reputation among parents.

OF K-12 TEACHERS USE TECHNOLOGY DAILY WITH THEIR STUDENTS Understandably so, too—it's not uncommon for a child to choose to play a video game instead of doing homework, and the rise of social media has also given rise to things such as cyberbullying. However, technology is becoming more and more prevalent in our everyday lives. From the way we work, communicate, and grow, technology plays a vital role, and it's important for the modern classroom to reflect this. Despite its mixed reputation, technology can be a wonderful—if not vital—supplement to a student's education.

Engagement

- Incorporating different types of instruction and activities within the classroom can encourage both increased student engagement and greater retention of material.
- The act of **gamifying** typically monotonous tasks and lessons can encourage students to actually **learn**, **analyze**, and **apply** material.



Community and Collaboration

- The use of technology encourages students to work with peers, give and get feedback, and share their finished work with others.
- Digital apps and websites such as Google Drive increases the **efficiency and ease** of group work by allowing students to **instantaneously communicate** with their peers, even while at home.

Accessibility

- Assistive technology is the term for tools and devices used by students with disabilities that allow them to perform to their highest ability within the classroom.
- Many times, students with disabilities will have modified personal devices that cater to their individual needs.
- Assistive technology allows students with disabilities greater independence and access to materials, increasing their chances for success and meaningful learning.
- The normalization of personal devices for all students helps students with disabilities to feel less singled out.



Development of 21st Century Skills

students to succeed in our modern world. They include ..

Communication

Initiative

Critical Thinking

Technology Literacy

 The use of technology in the classroom helps students to develop skills they may need later on in life, either in a continued education, the workplace, or performing daily tasks.

• These may include a number of 21st Century Skills, a set of skills deemed necessary for

Creativity

Flexibility

Information Literacy

Productivity

Collaboration

Leadership

Media Literacy

Social Skills

- Encourage your student to keep instructional materials or directions pertaining to their classroom technologies. This way, you can reference them later on in case of a technology emergency, or if you're simply just curious about your student's classroom experience.
- Establish a mode of communication between yourself, your student, and your student's teacher. While some teachers prefer to keep their contact with parents limited, many teachers, especially those in younger grade levels, will gladly answer any concerns or questions you may have about your students or technology. Having an established mode of communication will help ensure that everyone involved in your student's educational experience is on the same page.

Sources:

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Stauffer, B. (2020, March 19). What are 21st Century Skills? Applied Educational Systems. Accessed from: https://www.aeseducation.com/blog/what-are-21st-century-skills

Top 5 Benefits of Technology in the Classroom. (n.d.). Walden University. Accessed from: https://www.waldenu.edu/programs/education/resource/top-five-benefits-of-technology-in-the-classroom





WHAT COULD I TEACH AT UCF?





4 215: DOCUMENT DESIGN

Fundamentals of design + application through short modules and larger client-based projects

324 1: TECH WRITING

Specifications, technical descriptions, documentation, correspondence, proposals

6261: TC THEORY & PRACTICE

Background of technical and professional communication, current applications (UX/XA, usability, social justice, data science, etc.)

WHAT COULD I DEVELOP?







4 XXX/ 6XXX: CONTENT STRATEGY

Social media content and strategy, usability, communications inventories and audits, user research

3XXX: TC RESEARCH

It isn't just grad students who need methods training! Methods for workplace, community, online, and user research

4 XXX: NONPROFIT & ADVOCACY COMM

Fund appeals and direct mailings, press releases, newsletters, reports, issue summaries and white papers; service learning!





OWI DESIGN + TEACHING

- Designed fully online, asynchronous first-year writing course for 8- and 16-week delivery
 - Two course themes: digital rhetorics, academic writing & research
- Built curriculum from learning outcomes
- Focus on personalization, accessible pedagogy, responding to student needs

MODULAR CURRICULUM

Project 1 Options	Project 2 Options	Project 3 Options	
Digital Autobiography Narrative of student's experience with a digital tool, technology, or space	Researched Argument Student conducts secondary research to construct an argument about digital technology in their field of practice, or another discipline that's of interest	Advocacy Infographic Remediate Project 2 into an infographic aimed at informing and persuading a different audience, using Piktochart	
Digital Artifact Analysis Select digital tool, app, or device and engage in a rhetorical analysis to shed light on its context and meaning	Community of Practice Report Conduct primary and secondary research on the technology use of a community of practice (Wenger, 2011)	TED Talk Remediate Project 2 into an interesting and informative TED talk, geared toward a specific audience and event	
Profile of a (Virtual) Place Identify a digital community or website and analyze its audience and features	Mapping the Problem Essay Identify a technological problem to be overcome, and collect primary data (through interviews, surveys, observations, etc.) to place into conversation with the existing conversation on the issue	Transmedia Storytelling Students select from a list of books, films, and games, and present a theme from that media in a new medium (blog, website, video PSA or trailer, magazine article, etc.)	



PARS in Practice



Edited by Jessie Borgman and Casey McArdle

Grid approach for mixing and matching assignments for online writing instructors

- Saves time and resources
- Ensures consistent learning progression and adherence to programmatic outcomes

ACCESS

Ensuring access to resources; multiple points of access into content; transparency for students in outcomes + assessment; foregrounding usercenteredness from the beginning of the design process "Start with what you know:" language and pedagogy; anti-racist and accessible linguistic practices (removing harmful language and policy); meeting students where they are at pedagogically

EQUITY

"Engineers are not the only professional designers; everyone designs who devises courses of action aimed at changing existing situations into preferred ones" (Herbert Simon)

DESIGN

THANKYOU for your time!



QUESTIONS? IDEAS? DR. ALLEGRA W. SMITH | ALLEGRA-W-SMITH.COM

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