eLearning: An International Collaborative Exploration of Higher-Educational Technology Usage in Africa

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Who are we?

The International Research Collaborative for Established and Emerging Scholars (IRCEES) in Educational Technology is a collaboration of US and African researchers and practitioners being piloted by e/merge Africa and the AECT Culture, Learning and Technology (CLT) division.
IRCEES Seeks to:

- Develop a **research community of practice** to support educational technology faculty researchers and practitioner-researchers;
- Grow a community of researchers exploring the **intersections of culture, learning and technology**;
- Provide an open and supportive space for international **research exchange and collaboration** between established and emerging scholars in educational technology;
- **Encourage and support** international research teams studying issues at the intersection of culture, learning and technology; and
- Provide **research and publication mentoring** for early-career and aspiring researchers in African countries and those working in resource-constrained environments more broadly.
Supporting Historically Marginalized and Underserved Learners

Facilitators:

Alice Barlow-Zambodla (merge Africa facilitator)
Juhong Christie Liu (AECT CLT facilitator)

Members:

We wanted to learn together and work together. We also wanted to share the expertise we had.

First we needed to collect perspectives. We created a survey to better understand people’s expertise, expectations, availability, roles, tools, and shared interests. We summarized and discussed this survey before moving forward.
Shared Interests

This project was intentionally constructed as collaborative action research, to allow scholars to learn from each other and hone their research skills. It allowed us to start working together despite our diversity of interests and experiential levels.
Perspective Sharing

What are some topics you think would be interesting to research in this type of international, collaborative group?

(feel free to notice what other people are suggesting and introduce yourself later to potential collaborators!!!)
Our Research Focus

After the survey discussion, we recognized we had little time to return proposals for AECT. People formed small groups based on what we were passionate about. We had three or four proposals suggest but only two had enough group motivation to actually get written and submitted. There was great shared interest around the two that were submitted and accepted:

1. Higher educational technology access, usage, and innovations in Africa
2. Educational technology access and collaborative research practices.

Luckily, both topics had a high degree of overlap and worked well together.
Higher Ed Educational Technology

We decided to collect, correlate, and analyze information about educational technology in higher education in Africa to strengthen our understandings of the systems that influence and enable educational technology usage.

In order to make educational technology more accessible for different audiences, we needed to examine not just what educational technology can do for people, but also what enables and constrains that usage in different higher-education settings.

The difficulty is that different systems of technology usage tend to be employed in different geographic areas and there are few individuals actively collecting and collating this information cross-nationally.
Methodology

To gather this information, we will use surveys and semi-structured interviews. The multiple approaches allow us to collect demographic information more broadly with the survey and then gain rich, deep, understandings from semi-structured interviews. Research tools were collaboratively constructed and agreed upon by the community.

Our Grad Tour Question:

Thinking about your work life, what people, or groups do you use educational technology with (students, administration, etc.?) – If groups mentioned are limited you can prompt with (students, other faculty (here or elsewhere), administration, collaborators)-

Mini tour- Starting with the first group.
1. What educational technology do you use with this group?
2. What is this educational technology used for?
Our Approach

We spent a lot of time thinking and talking about what approach we wanted and what process made sense. We identified some key aspects:

- Collaborative with everyone learning from each other
- Everyone contributes their expertise
- All perspectives being considered
- Consultative and participatory approach between mentors and mentees
- Flexibility with time commitments and contributing when possible (stepping up and stepping in)

Ultimately we wanted a process that understood constraints and still supported collaboration.
What have we done? An Outline

- Introductions
- Survey
- Proposals
- Process Definition
- Material Creation
- Pilot Interview
- IRB and Ethics
- Re-connecting with the group

COLLABORATIVE PRODUCT DESIGN PROCESS

Summarizing The Problem  Collaborative Problem-Solving  Identifying a Model  Creating a Prototype  Testing the Prototype  Gathering Feedback  Refining the Prototype

This collaborative product design process is conducted in a problem-based learning format. A needs and constraints analysis is used to summarize the problem at the beginning of the process. The instructional designer facilitates the design process and guides the collaborative group through decision-making and product development. The model also incorporates iterative product refinement to benefit from understandings derived from product use.

Hannah M Grossman, PhD
External Expertise for Learning Support

To help us learn semi-structured interviewing, Dr. Mary Brenner joined us for a Zoom Webinar about who to conduct a semi-structured interview. This Webinar had live attendees and was recorded for later viewing.

- Descriptive Questions
  - Grand Tour
  - Mini-Tour
  - Example
  - Experience

- Structural Questions
  - Verification questions: So android is a type of software?
  - What are the kinds of ...(software, devices)

- Contrast Questions: What is the difference between platform and an operating system?
Intentional Learning for Collaborative Research

Together we worked at coming up with materials that everyone agreed were valid for collecting the data we wanted. We evaluated each others contributions and provided feedback to refine products until we were happy with the prepared materials. We did this as large groups, small groups, and individuals; then we shared what we had created. This all needed to be constructed before IRB
Where we are going

- Training for conducting interviews
- Distribution of the survey
- Data collection
- Data coding
- Summarizing information
- Writing/Sharing our work
Reflections on the Process

Create a video of yourself (5 minutes long or less) talking about the following things:

1) Who you are
2) Why you got involved in HCEES
3) Why you decided to be a part of this project
4) How the project has influenced you so far
5) What you think other people in similar situations should know about this approach to collaborative learning

Tips: Public videos to be shared at AECT & beyond

2 Awesome Responses 6 replies 6 upvotes

Dr. Nonpilo Tshuma
Stellenbosch University

T. Forbes
PhD Student
IRB Challenges, Strategies, and Recommendations

**Challenges:**
- IRB and Ethics - International Populations (historically marginalized and underserved)
- Participating in our own capacity, not representing our organizations
- All different places and spaces (some formal academic, others not).

**Recommendations:**
- Work with your IRB office
- Communicate, communicate, communicate.
- Web-based meetings to share forms as they are being filled out.
- Shared reflection

**Study Locations**

1.0 *Indicate the locations where any research activities will be performed by the UCLA research team with participants and/or private information obtained.

Check all that apply:
- a. UCLA Sites or UCLA Health System Sites
- b. Off Campus (in California)
- c. Outside California (in the U.S.)
- d. Outside the United States *See note at right
- e. Internet

1.1 If you selected b, c or d above, please provide your assurance that documentation of each site's permission to conduct the research at the site(s) will be obtained and maintained by the UCLA PI as applicable:

Agree ✔
Project Iterations and Refinement

**Timing**- How often, what day, which components for who

**Scheduling**- Zoom, Hangouts, dates due, IRB TAKES FOREVER!!!!!

**Roles**- Deepak initially, trying to make due, asking AECT for support, Introduction of Christie, figuring out powerful collaboration methods.

**Reunification**- calls badly scheduled, changing of times, people not having roles they could fill while waiting for other aspects of the project.
Collaborative Learning

### Challenges:
- Geographic distribution
- Time difference
- Cross-cultural communication/language
- Cross-disciplinary communication
- Creating meaning shared online spaces (Facebook, WhatsApp, Hangouts, Zoom, Adobe Connect)
- Unreliable availability of necessary tools and resources (load-shedding, connectivity, portable internet)
- Keep people caring/motivated
- Competing commitments

### Strengths and Supports:
- Shared resources (Zoom & Google Drive)
- Communicating difficulties and strategic planning (using WhatsApp as a back channel to Zoom)
- Multiple communication techniques
- Big group to small group and back
- Recording for later viewing
- Reminders and deadlines
Discussions on Approach

What parts of this approach seem challenging to you?

What parts of this approach were exciting to you?

Are there suggestions, recommendations, or supports you came up with in learning about our project?
Questions and Troubleshooting

Are you doing similar work and having problems?

Do you want to talk this over with us to gain a deeper understanding?

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