WELCOME!

1. Do not use talk button to test audio.
2. Instead use Audio Setup Wizard from the Tools Menu.
3. To turn on captioning press CNTRL+F8.
4. For technical support use the chat box.

UNIVERSAL DESIGN AND DISTANCE EDUCATION

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About the Speakers

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About the SDDL Project
www.ist.hawaii.edu

Professional development for faculty and instructors on addressing diverse learning needs.

Longitudinal study of impact of the trainings.

Participants incorporated elements of training into their classroom teaching and preparation.

Trained over 2,000 people in 46 states and 20 countries.

Overview of Presentation

I.   Foundation for Distance Education

II. Application of Universal Design

III. Web Accessibility

IV. Emerging Technologies

V.   Further Resources

Foundation of Distance Education

Distance Education Defined

Definition of distance education.

A formal learning activity which occurs when students and instructor are separated by geographic distance or by time, often supported by communications technology.

Types of distance education.

Synchronous, Asynchronous, Hybrid

Foundation

Promise of Distance Education for Meeting the Needs of Diverse Learners

Bridge barriers of distance, cost, environmental access.

Bring together teachers and learners from diverse perspectives and cultures.

Application of Universal Design

Universal Design Defined

Universal Design is the design of products and environments to be usable by everyone, to the greatest extent possible, without the need for adaptation or specialized design." Ron Mace

Universal Design for Learning (UDL) provides a blueprint for creating flexible goals, methods, materials, and assessments that accommodate learner differences. CAST
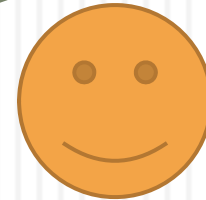
Application

Principles of Universal Design for Learning

1. **Multiple Means** of *Representation*

2. MULTIPLE MEANS OF EXPRESSION

3. Multiple **Means** **of** **Engagement**

Application

Examples of UDL Applications in the Online Classroom

Maximizing Representation, Expression and Engagement

Synchronous Web Conferencing Platforms

> Captioning, audio description, use of multi media, participant involvement

Asynchronous Learning Management Systems

> Interactive syllabus, collaborative discussion, calendars, media formats, communication, weekly assignments

What is Web Accessibility?

- *Accessibility* focuses on people with disabilities — people with auditory, cognitive, neurological, physical, speech, and visual impairments

- Benefits older people, English as a Second Language (ESL) users, and temporarily disabled people

Web Accessibility

World Wide Web Consortium (W3C)

www.w3c.org

☐ Found by Tim Berners-Lee, W3C Director and inventor of the World Wide Web
   "*The **power of the Web is in its universality**. Access by everyone regardless of disability is an essential aspect.*"

☐ Goal of providing web access to everyone through **internationally recognized standards.**

What is Web Accessibility

Output Device Independence

- ☐ Screen reader useable (voice only transmission)

- ☐ Logical navigation through webpage and website (mouse free)

- ☐ Easy to read with minimal distractions

- ☐ Use of Cascading Style Sheets (CSS) for separating content and design elements

Universal Design Vs. Accessibility

UDL

How can the material, content and mode of delivery be improved for better learning outcomes?

Access

Can the learner access the material, content, & mode of delivery?

Accessibility and Distance Education

Alternative Formats

- ☐ Screen readable formatted documents (PDF)

- ☐ Logical navigation of materials

- ☐ Tagged or labeled photos and graphics

- ☐ Captioned videos and multi-media presentations

Emerging Technologies

Web 2.0 Social Media (Interactive)

- Thousands of new programs available for collaboration and presentations (VoiceThread - Gallaudet University, Accessible Twitter)

- Mobile devices

- Multi-User Virtual Environment (MUVE) Second Life, Blue Mars, Gaia, Webkinz

Emerging Collaboration Technology

VoiceThread – Presentation program with interactive feedback via the web or phone

"VoiceThread is an application designed for people to have discussions about shared digital media and commented on by anyone with permission to access to the VoiceThread discussion."

**VoiceThread Universal** – interface specially designed for screen-reading software

Emerging Communication Technology

- Web accessibility for **Twitter**
  http://www.accessibletwitter.com/

- **Accessible Twitter** is an alternative to the Twitter.com website. It is designed to be easier to use and is optimized for disabled users

Emerging MUVE Technology

Webkinz

Gaia

Second Life

Blue Mars
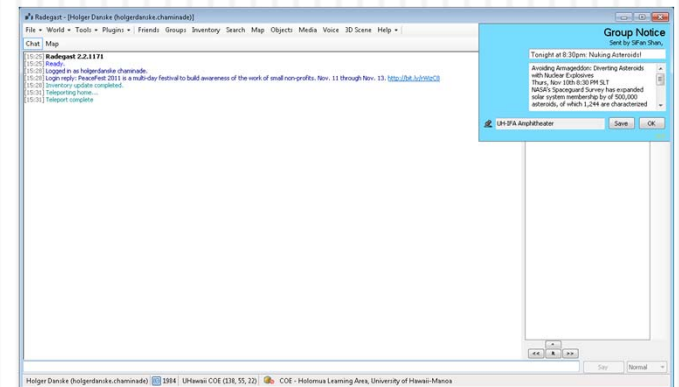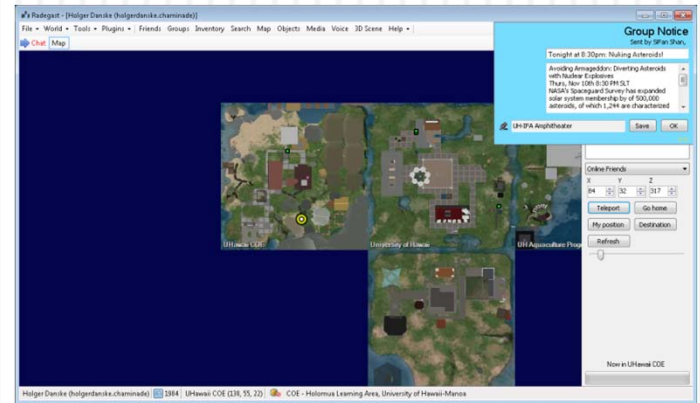
Additional Resources

Students with Disabilities as Diverse Learners
www.ist.hawaii.edu

W3C Web Accessibility Initiative www.w3c.org/wai

Center for Applied Special Technology (CAST)
www.cast.org

WebAIM http://www.webaim.com

Virtual Ability www.virtualability.org

Radegast www.radegast.org