



# Universal Design in Higher Education: From Principles to Practice

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# DO-IT

Disabilities,  
Opportunities,  
Internetworking, and  
Technology

# DO-IT

Goal: Increase success of students with disabilities in academic programs & careers using technology as an empowering tool.

# Goal: Equal Access

**Everyone** who qualifies for services:

- feels welcome &
- can participate comfortably & efficiently.

# Access Challenges

Differences to consider:

- Physical
- Sensory
- Cognitive/learning
- Attention
- Communication
- Socioeconomic, race, culture, gender

# Legal → Access

- Section 504 of the Rehabilitation Act of 1973
- The Americans with Disabilities Act of 1990 (ADA)

# Approaches to Access

- Accommodations
- Universal Design

# Accommodation

Alternate format, service, adjustment, &/or technology for a specific teacher, student, parent, employee, visitor, etc.



# Universal Design

“the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.”

-The Center for Universal Design: [design.ncsu.edu/cud](http://design.ncsu.edu/cud)

# Universal Design

- “Traditional” Design
- Barrier-Free Design
- Accessible Design
- Usable Design

# Universal Design

**minimizes**  
the need for  
accommodations.

# Universal Design and The Web: Design for people who...

- use audible interfaces
- are unable to hear the audio
- use an input device other than a mouse
- can not perceive differences in color
- have difficulty reading
- have difficulty attending
- are technologically limited



**DO-IT**

# DO-IT Video Search

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Search the full text of DO-IT's video library:

## Your Search Results

We found 10 captions matching your search terms. Select any caption text to play the video starting at that point. Select any video title to play that video starting from the beginning.

- ["So that's really cool."](#)  
Spoken at 07:08 in [Camp: Beyond Summer](#) (1997)
- ["And...it's cool."](#)  
Spoken at 00:34 in [Invisible Disabilities and Postsecondary Education](#) (2007)
- ["\(Tiffany\) I think it's really cool."](#)  
Spoken at 07:03 in [Camp: Beyond Summer](#) (1997)
- ["\(Tressa\) That's really cool!"](#)

## Now Playing



**Title:** Invisible Disabilities and Postsecondary Education

**Year:** 2007

**Runtime:** 18:43 minutes

# UD Checklists

- advising
- career services
- financial aid
- housing
- residential life
- instruction
- libraries
- admission
- registration
- student orgs.
- student services
- tutoring centers
- computing depts.
- computer labs
- distance learning

# We Need:

- Universal design (proactive)
- &
- Accommodations (reactive)
- Policies & procedures address **both**

# UD Approach

- High value on diversity & inclusion
- Strives to make products & environments welcoming, accessible, & usable by everyone
- Use a process w/ goal & strategies
- Can be implemented incrementally













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...an international association serving information providers and users

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Well, here we are obviously in front of our nation's capitol.



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# PROVOST TOWN HA

*Students are invited to a discussion about the role of the UW and you play in understanding it.*

**Info**



## The Weather of the Pacific Northwest

New book by UW atmospheric sciences professor explains many phenomena of the region. **More >**



## Starry Nights

You can still "see" the winter at twice-monthly events at the Astronomy Department Planetarium. **More >**

## UW QuickLinks

[News](#)

## News from the University of Washington



**Book challenges conventional wisdom**

There are three different levels of this tutorial, coded by color. Green is for those readers who want the most basic introduction. It is targeted at those who are unsure what object-oriented programming is, and could use a good analogy to make things clearer. Yellow is for those who want to be able to understand object-oriented programming just enough to be able to read and follow it, but are not yet ready to learn the intricacies of coding Java. And finally, the third level, red, is for you daredevils who want to be able to program in Java, but just want to ease into it slowly.




SUCANDA

# Main Menu

**Introduction**  
Why are cells so important?




**Build-a-Cell**  
Construct different cell models




**Cell Structures**  
Get info on organelles and other structures



**Linking Structure and Function**  
Match organelles to their jobs



**Cell Specialization**  
Analyze data and relate it to specific cells



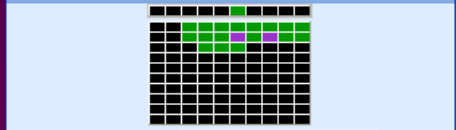
**Assessment**  
Tried all the exercises?  
Check out how much you know!

Terry Thompson  
Technology Specialist  
DO-IT



- Terry
- Andy
- Bobbie
- Bucky
- ckb

Call Someone  
More Choices >>  
Search list for person:



Feedback to Presenter Proceed

Preparing for a Meeting

- Setting up your user preferences
- Connecting to audio
- Chatting
- Switching to full screen view

Next: Attending a Meeting

# IT Accessibility

Terry Thompson  
Technology Specialist  
DO-IT & AccessIT  
University of Washington  
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Questions and Answers

No questions have been answered yet in this meeting.

Is this application accessible?

Add Module

Personalize Page

**Tools**

- Announcements
- Tasks
- View Grades
- Send Email
- User Directory
- Address Book
- Personal Information
- Calendar

**Hot Links**

No items available.

**Hot Spots**

No items available.

**Quick Tutorials Catalog**

**My Announcements**

No Institution Announcements have been posted in the last 7 days.  
No course announcements have been posted in the last 7 days.

[more.....](#)

**My Calendar**

No calendar events have been posted for the next 7 days.

[more...](#)

**My Organizations**

You are not currently participating in any organizations.

**Pending Outcomes Artifacts and Portfolios**

The Outcomes Artifacts and Portfolios that are pending submission are listed below. Click **Create** to navigate to My Portfolios to begin building the Artifact or Portfolio. To edit the Artifact or Portfolio, click **Modify**. Click **Show All** to navigate to My Portfolios to view all Artifacts and Portfolios.

<b>Artifacts (0)</b>	Portfolios (0)
----------------------	----------------

**My Courses**

**Courses you are teaching:**

- Accessibility Evaluation Course
- Evaluation Program - Blank course

**Quick Tutorials**

**Quick Tutorials Library**

Welcome to the new Quick Tutorial Library! We've updated our Quick Tutorial Library to make it easier to find the feature overviews that you're looking for. To learn more about the Blackboard Academic Suite through short clips that demonstrate new key features and functionality, please reference the collection below.

These Academic Suite tutorials are organized by version, product and feature. If you are looking for any Quick Tutorials from Release 6, please [visit our archives](#).

Looking for additional training on Blackboard products? Please visit [Blackboard Training](#) for more information.

**The Blackboard Academic Suite Release 8.0**

PRODUCT	FEATURE
Content System	Metadata



## Grade Center ▼

In the [screen reader view](#), the table is static and grades may be entered on the Grade Details page accessed by selecting the table cell for the grade. In the interactive view of the Grade Center, grades can be typed directly in the cells. Use the arrow keys or the tab key to navigate through the Grade Center and the Enter key to submit a grade.

[Create Column](#)[Create Calculated Column](#) ▼[Manage](#) ▼[Reports](#) ▼[Work Offline](#) ▼Current View: [Full Grade Center](#) ▼[Set as Default](#)Sort Columns By: [Layout Position](#) ▼Order: [▲Ascending](#) ▼

Grade Information Bar

Grade Type: **Weighted Grade** | Points Possible: **100** | Displayed As: **Letter** | Visible to Users: **Yes**[Move To Top](#)[Email](#) ▼[Icon Legend](#)

<input type="checkbox"/>	Last Name <span>▼</span>	First Name <span>▼</span>	Username <span>▼</span>	Student ID <span>▼</span>	Last Access <span>▼</span>	Availability <span>▼</span>	<input checked="" type="checkbox"/> Weighted Gr: <span>▼</span>	Attendance <span>▼</span>
<input type="checkbox"/>	Copy	Ian	icopy		July 10, 2008	Available	B	85.00%
<input type="checkbox"/>	Cruz	Cindy	ccruz		September 15, 2008	Available		
<input type="checkbox"/>	Goldman	Greg	ggoldman		July 10, 2008	Available		
<input type="checkbox"/>	Holland	Hector	hholland		July 10, 2008	Available		
<input type="checkbox"/>	Jacobs	Jake	jjacobs		July 10, 2008	Available		
<input type="checkbox"/>	Jones	Jeremy	jjones		July 10, 2008	Available		

x

- > View User Statistics
- > Browse Adaptive Release Status
- > Email User
- > Hide User

Who do these  
Universal Design  
examples apply to...

# Example of UD

## **Classes:**

Notes available online.

Captioned video online with search  
ability.

# Example of UD

## **Museum:**

Visitor can read or listen to the contents.



# Example of UD

## **Publications/Websites:**

Pictures with diverse characteristics with respect to race, gender, age, & disability.

# Example of UD

## **Dormitory:**

An emergency alarm system with visual, aural, & kinesthetic characteristics.

# Example of UD

**Software:**

Would you really like to delete  
that?

# Example of UD

## **Science lab:**

Adjustable table & flexible work area that is usable by students who are right- or left-handed & have a wide range of physical abilities.

# Universal Design

- equitable use
- flexible in use
- simple and intuitive
- perceptible information
- tolerance for error
- low physical effort
- size and space for approach and use

# Resources

**DO-IT**

[washington.edu/doit](http://www.washington.edu/doit)

This session

<http://staff.washington.edu/tft/talks/csun2009/ud.html>

The Center for Universal Design in Education

[washington.edu/doit/CUDE](http://www.washington.edu/doit/CUDE)

How was  
this session  
Universally  
Designed?