**An Introduction to Universal Design**

March 6, 2009

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**UNIVERSAL DESIGN**

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**Different Learning Styles**

- **Visual**
  - Uses mental images
  - Prefers graphs, charts, and maps
- **Auditory**
  - Can follow discussions and lectures
  - May enjoy lectures or use audiotapes
- **Kinesthetic & Tactual**
  - May write definitions or need to move around
  - "Hands-on" who learn by doing

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**Considerations for UD**

- **The Professors Challenge**
  - Reacting responsively to the needs of each participant

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**Universal Design: Origins**

**Architectural/Product Design Movement**

As described by the [Center for Universal Design at North Carolina State University](https://www.ncsu.edu/)... "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"

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**Practically Applied, UD means**

1. Structures/products to accommodate the widest spectrum of users possible
2. Adaptability is subtle and integrated into the design
3. Designed for the divergent needs of special populations increasing usability for everyone

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Definition of Universal Instructional Design

“The basic premise of universal instructional design is that curriculum should include alternatives to make it accessible and applicable to students with different backgrounds, learning styles, abilities and disabilities.”

CAST (Center for Applied Special Technology)

Unique Aspects of UD

Emphasizes the integration of digital technologies into instruction
   - For instructional delivery (teacher)
   - To build and demonstrate competence (student)
Concerned with the learning environment
   - Size, space, and physical arrangement to ensure movement and a conducive environment
   - Multiple means of expression in teaching and learning
   - Delivery options for teachers and students

Academically Challenging?

- Universal Design does not reduce or remove academic challenges rather, it removes barriers to access for:
  1. International students/limited English speakers
  2. Students with disabilities (visible and invisible)
  3. Students who learn best in a style different than the preferred teaching style of the instructor
  4. Older students

Key UD Principle…

Retrofitting, while often effective, can be ugly…
Tools that Support Success

Integrating Visuals
Tips for Handouts

Comparison Grid/Concept Map

Benefits include:
- Alternate means for understanding
- Helps to make concepts more concrete
- Useful for visual and tactile learners

Comparison Grid/Concept Map

Compare and Contrast

Cluster/Word Web

Excellent tool for showing a flow of information and/or how concepts and ideas link to a main idea or topic.

5 W's Chart

<table>
<thead>
<tr>
<th>What happened?</th>
<th>Where did it happen?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who was there?</td>
<td>Who did it happen?</td>
</tr>
<tr>
<td>Why did it happen?</td>
<td>When did it happen?</td>
</tr>
</tbody>
</table>

To Demonstrate a Process

Stages of Tumor Progression
**Decision Trees**

Show What Actions to Take

**Tips for Including Visuals**
- Ensure that:
  - They add value
  - They are appropriate size and format for different connection speeds
  - Web-based pictures include alt tags
  - Embedded hyperlinks are not broken

**Tips for Effective Handouts…**
1. Use bold headings
2. Avoid unnecessary or complex words
3. Do not use all capital letters
4. Avoid use of italics and symbols
5. Avoid the use of non-standard fonts; they can confuse!
6. Integrate “white space”
7. Use strong font colors that print clearly, especially in black and white

**Universal Design for Learning Guidelines**

**Web-based Resources**

- www.DonFinn.com
- Handouts and materials from this workshop
- www.cast.org/teachingeverystudent/ideas/tes/
- Online book: Teaching Every Student in the Digital Age
- www.greatschools.net/cgi-bin/showarticle/2490
- Article: Universal Design for Learning—Improved Access for All
- www.eduplace.com/graphicorganizer
- Dozens of printable graphic organizers for classroom use
- www.cast.org/system/galleries/download/ncac/DI_UDL.pdf
- Report: Differentiated Instruction and Implications for UDL Implementation