Universal Design for Learning: Meaningful Access to the General Ed Curriculum for All Students
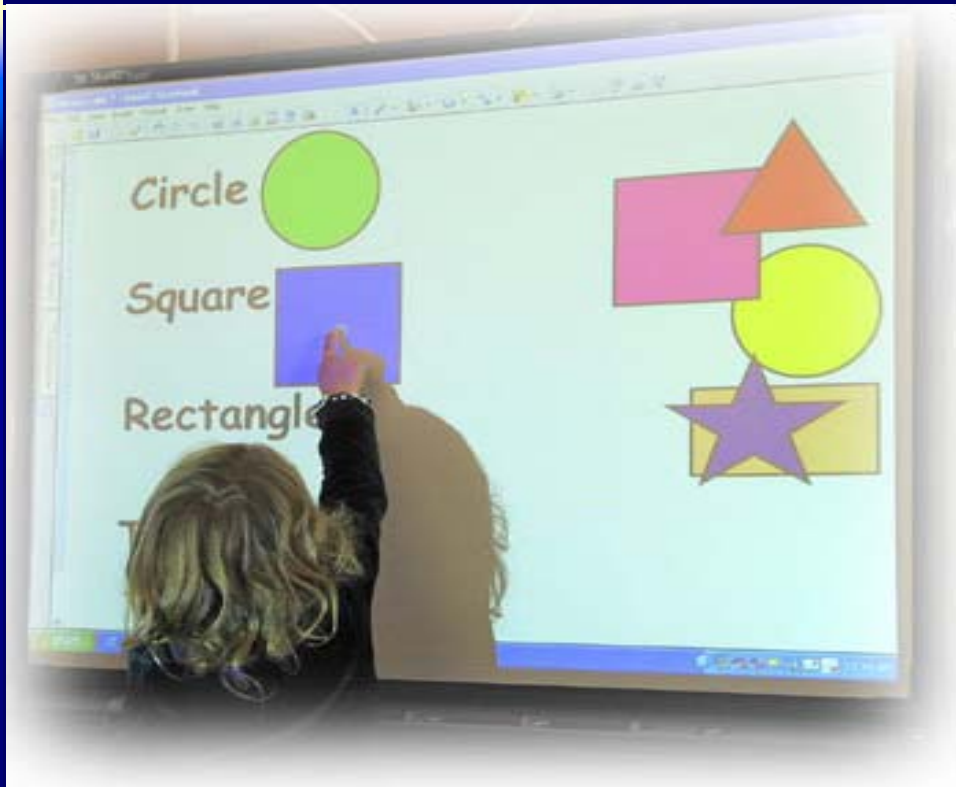
Ricki Sabia
National Down Syndrome Society
rsabia@ndss.org

Universal Design in Architecture and Products

- Curb Cuts

- Ramps

- Captions on TV

- Elevators

- Easy Grip Tools

Universal Design for Learning (UDL)

- Applies concept of Universal Design to education

- Principles developed in the 1990's by the Center for Applied Special Technology (CAST-www.cast.org)

- Federal support for UDL research, dissemination since 1999

UDL Benefits

- Recognizes the reality of classroom diversity

- Scientifically valid framework and set of principles for accessible curriculum design

- Provides physical and cognitive access to curriculum

UDL Benefits (continued)

- Minimizes retrofitting by teacher

- Supports meaningful access to the general education curriculum and successful inclusion in general education class

"Universal"

"Design"

- Curriculum must be designed <u>from the beginning</u> to be flexible.

- Must be customizable to provide both challenge and supports for many levels of abilities and learning styles

- Digital text is more flexible than printed text

- However, low tech options can be used

Visual display

Auditory display

CAST eReader - [Tale of Two Cities]

File   Edit   View   Window   Read   Format   Tools   Help

Tale of Two Cities
By Charles Dickens

Chapter 1: The Period

   It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair, we had everything before us, we had nothing before us, we were all going direct to Heaven, we were all going direct the other way--in short, the period was so far like the present period, that some of its noisiest authorities insisted on its being received, for good or for evil, in the superlative degree of comparison only.
    There were a king with a large jaw and a queen with a plain face, on the throne of England; there were a king with a large jaw and a queen with a fair face, on the throne of France. In both countries it was clearer than crystal to the lords of the State preserves of loaves
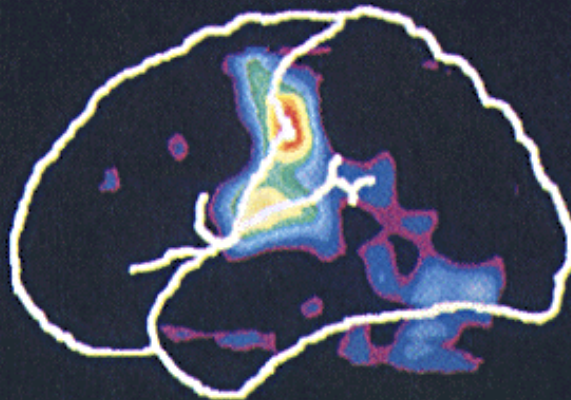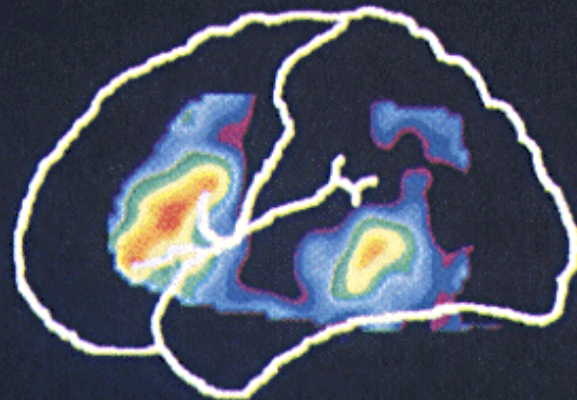
"For Learning"
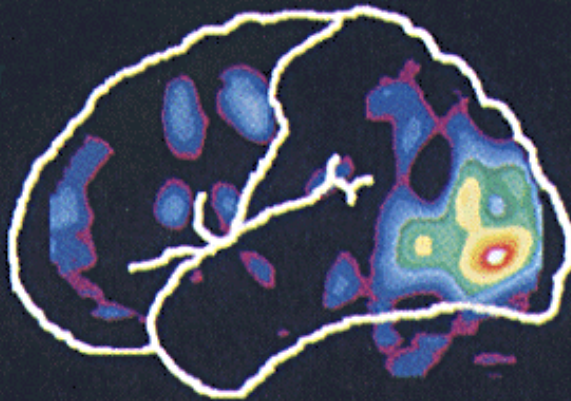
Passively viewing words
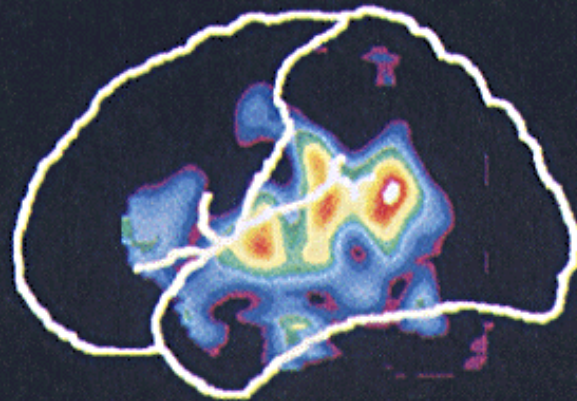
Listening to words

Speaking words

Generating verbs

UDL and the Learning Brain

- Recognition networks
- Strategic networks
- Affective networks

UDL and the Learning Brain

Recognition networks:
"the what of learning"

Recognition Network
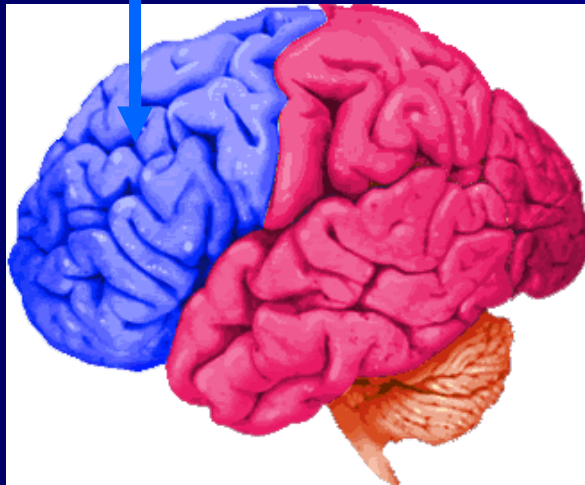
Recognition Network

UDL Principle:

Multiple Means of Representation

– Supports learning by providing:

- options for perception (interpreting sensory information)

- options for understanding language

- options for understanding concepts

UDL and the Learning Brain

Strategic Network

Strategic networks:
"the how of learning"

plan, execute, and
monitor actions
and skills

Strategic Network
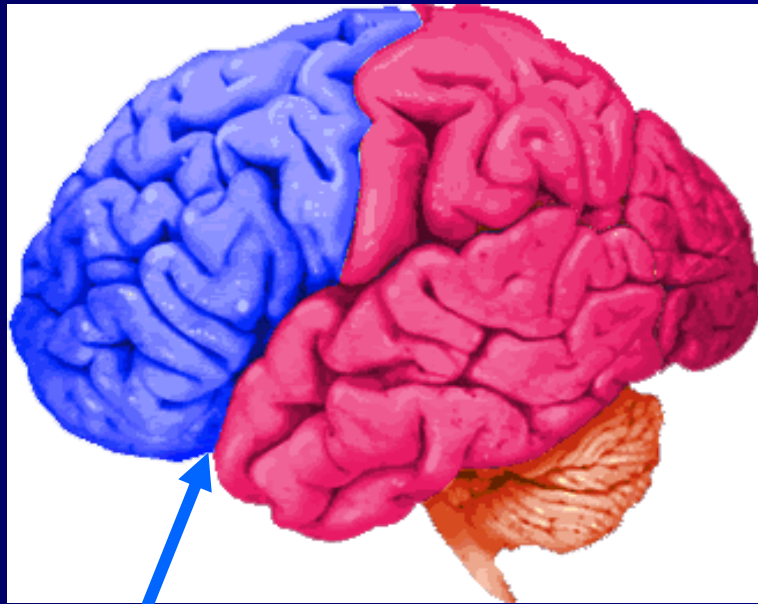
UDL Principle:

- Multiple Means of Action and Expression

    – Supports learning by providing:

        - options for physical actions

        - options for expressive skills

        - options for executive functions

Affective Network

UDL and the Learning Brain

Affective networks: "the why of learning"
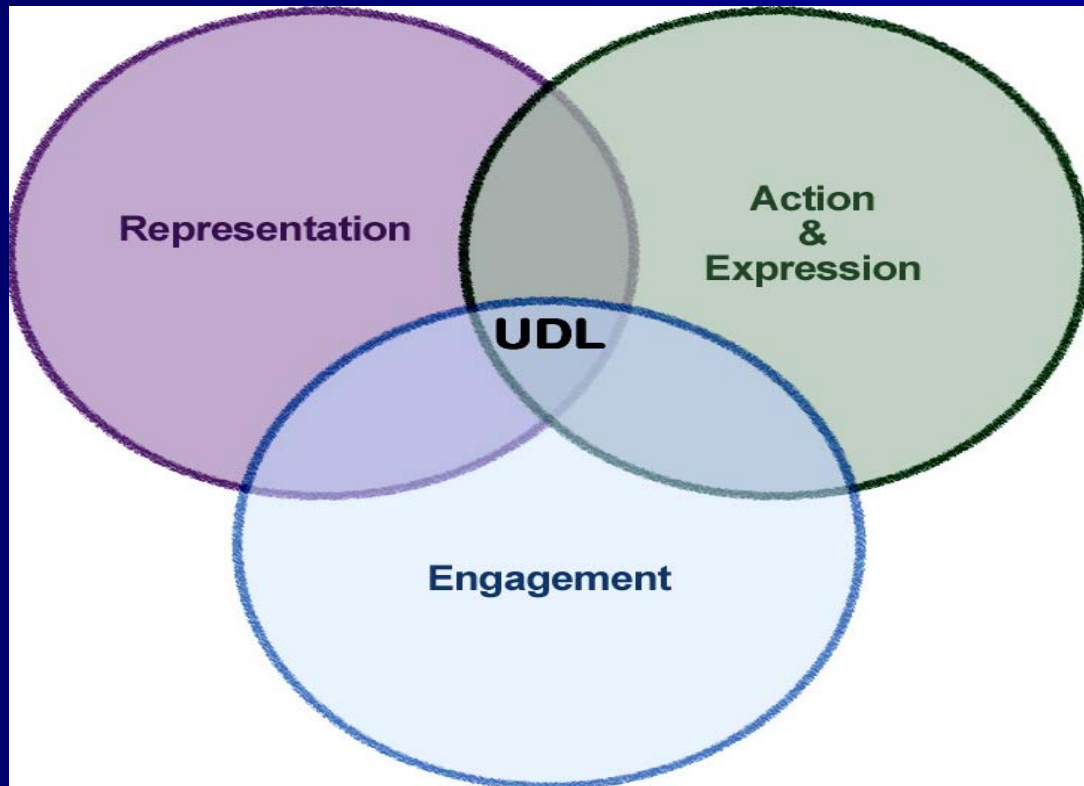
Affective Network

Affective Network

UDL Principle:

- Multiple Means of Engagement

  – Supports learning by providing:

    - options for creating interest

    - options for sustaining effort and persistence

    - options for self-regulation

Implementing UDL
http://www.cast.org/publications/UDL guidelines/version1.html

All the brain networks engaged simultaneously.

UDL in Practice

Apply the <u>three principles</u> to the <u>four pillars of curriculum:</u> educational goals, materials, methods, and assessments

This ensures all three brain networks are engaged at the same time to optimize learning and accurate assessment!

Instructional Goals

Traditional:

The means for accomplishing the goals are interwoven into the instructional goal.

UDL:

The means for attaining the goals can be individualized.

Instructional Materials

Traditional:

The materials are mostly print; everyone gets the same materials

UDL:

Use a variety of levels of printed text, digital, video, audio materials etc. (no tech, low tech and high tech)

Digital Examples of Materials:

Bookbuilder

http://bookbuilder.cast.org/

UDL Editions
http://udleditions.cast.org/

UDL Editions take advantage of the flexibility of digital media to reach and engage all learners. Leveled supports and the Texthelp Toolbar balance challenge and support for each learner, ages 10 and up.

Also see Thinking Reader
http://www.tomsnyder.com/products/ product.asp?SKU=THITHI&Subject =LanguageArts

Kurzweil
http://www.kurzweiledu.com/

Kurzweil 3000 (decosted) - [The Three Little Pigs_book.rtf]

File   Edit   Scan   Read   View   Tools   Reference   Window   Online   Help

| New | Open | Save | Print | Scan | Back | Read | Forward | Audible | Definition | Synonym | Syllables | Spell | Help |

VW Kate | Self-paced | Paragraph | 100 | 200% | 1 | 1 | 1

"Not by the hair of my chinny chin chin" said the pigs.

Well, the wolf huffed and puffed but he could not blow down that brick house.

But the wolf was a sly old wolf and he climbed up on the roof to look for a way into the brick house.

The little pig saw the wolf climb up on the roof and lit a roaring fire in the fireplace and placed on it a large kettle of water.

Kidspiration
http://www.inspiration.com/Kidspiration

Inspiration
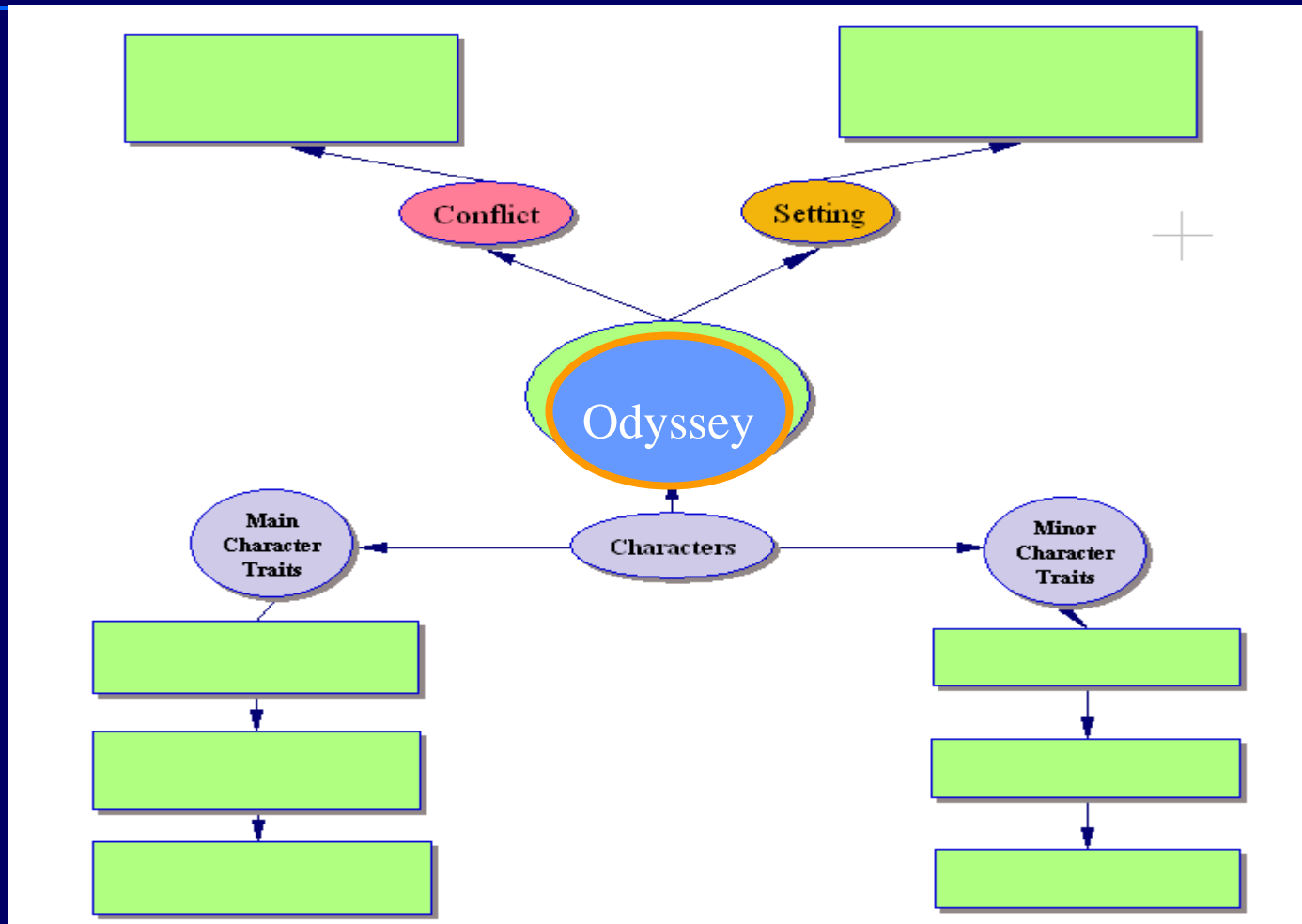
Power Point
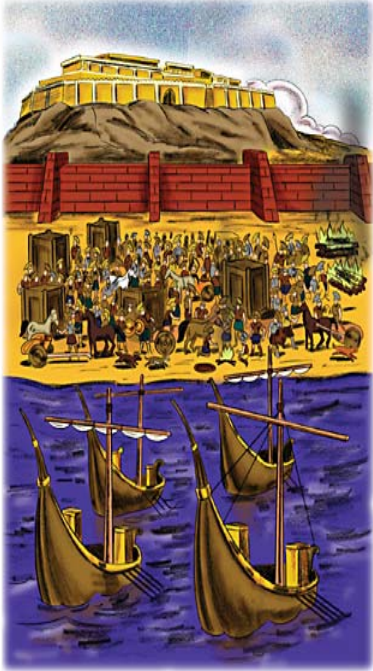
Chapter One
A Call to War

- Long ago on the island of Ithaca Greece, a man named Odysseus lived. He was the king of this island.

Don Johnston Start to Finish Products

http://www.donjohnston.com/products/start_to_finish/

Teaching Methods

Traditional:

Usually lecture style, homogenous grouping, unsupported note-taking

UDL:

- Avoid limiting presentation style.
- Frequent questions, clarification, interactivity
- Heterogeneous working groups
- Provide adapted materials for note-taking

Assessments

Traditional:

Administer the end-of-chapter test, which consists of multiple choice and short essay answers.

UDL:

- Ensure test objectives match instructional objectives

- If needed consider alternate means of delivery, modification of assessment content, different question format

National UDL Task Force

- Coalition of 38 national general education and disability groups; some with counterparts at state/local level

- Mission: promote implementation of UDL through policy and dissemination of information to stakeholders

- Biggest Challenge—get recognition that this is for ALL students not just a special education issue.

Federal Level-Task Force Action Steps

- IDEA-needs UDL language, add to NIMAS, Universally designed assessments

- ESEA/NCLB- had briefing and presented draft language

- Higher Ed Act – incorporated UDL language in reauthorized Act

Federal Level-Task Force Action Steps

- Seeking more grants and TA from Department of Education

- Communication campaign-OSEP Toolkit

- UDL Project Forum

What You Can Do- Advocacy for UDL

National Level

- Educate your Representative and Senators and/or their staff about UDL

- Respond to NDSS alerts

Advocacy for UDL

State level (similar for local level)

- State coalition of stakeholders
- Statewide conference on UDL.
- Inform State officials/legislation
- Encourage development of state strategic plan
- Get UDL in State technology plan

Advocacy for UDL

Local level (additional)

- Meet with Board of Ed members
- Testify at budget hearings
- Meet with curriculum department
- Address textbook and instructional material selection process
- Encourage development of site for teachers to share materials

Advocacy for UDL

School Level:

- Have one-one conversations with principal, teachers and other parents
- Present at staff and PTA meetings
- Recruit them to advocate with you
- Encourage attendance at CAST Institutes

http://www.cast.org/pd/institute/index.html

UDL Principles and the IEP Goals and Materials

- Selection of curriculum objectives per marking period.
- Homework and projects aligned to selected objectives.
- Alternate formats of textbooks, novels and supplemental materials
- Use of computer for writing and for accessing software.
- Preview of instructional materials.

UDL Principles and the IEP Teaching Methods and Assessments

- Class discussion questions in yes/no or multiple choice format.
- Teacher training on technology
- Teacher-made assessments based on curriculum objectives, which are designed to eliminate barriers caused by the disability.
- Digital assessments