



Success in the General Curriculum

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Goals of this Session

1. Understand the Basic Principles of Universal Design for Learning
2. Identify strategies that are used to support Students with Disabilities in the general curriculum
3. Compare UDL and Differentiation
4. Explore Assistive Technology that supports UDL

Characteristics of Our Students

- Different Learning Styles
- Varied Background Knowledge
- Different Languages and Cultures
- Different Abilities
- Attention Disorders
- Processing Disorders
- Behavior Problems
- Poor Organizational Skills

Disabled Curriculum?

Goals

Methods

Materials

Assessments

Are we designing our curriculum for all students instead of retrofitting for certain students?

<http://www.udlcenter.org/aboutudl/udlcurriculum/addressdisabledcurricula>

What is UDL?

Universal Design for Learning provides a framework for individualizing learning in a standards-based environment, through flexible pedagogy and tools. It challenges teachers to incorporate flexibility into instructional methods and materials as a way to accommodate every student in the classroom.

www.cast.org

<http://www.osepideasthatwork.org/UDL/instrpract.asp>

UDL and the Law

- Higher Education Opportunity Act (HEOA) of 2008 (Public Law 110-315)
- 2004 reauthorization of the Individuals with Disabilities Act (IDEA)
- Assistive Technology Act of 1998

Let's Look More Closely

- Framework
- Individualized
- Standards-based
- Flexible
- Methods and Materials
- Accommodate

UDL Principles

- **Principle 1:** To support **recognition** learning, provide multiple, flexible methods of **presentation**.
- **Principle 2:** To support **strategic** learning, provide multiple, flexible methods of **expression** and **organization**.
- **Principle 3:** To support **affective** learning, provide multiple, flexible options for **engagement**.

www.cast.org

Multiple Means of Representation – the “What” of Learning

This principle is based on the brain’s recognition networks—the networks used to **identify** and **categorize** what we see, hear, and read.

Perception

- Provide ways to customize display of information, offer auditory formats, alternatives for visual information

Language, Expressions, Symbols

- Clarify vocabulary and symbols, syntax and structure, support decoding of text and mathematical notation, promote understanding across languages, use multiple media

Comprehension

- Activate or supply background knowledge, focus on patterns, big ideas, and relationships, guide processing of information, maximize generalization

Multiple Means of Action and Expression - the “How” of Learning

This principle is based on the brain’s strategic networks—the networks used for planning and performing tasks. Students differ in the ways that they can navigate a learning environment and express what they know.

Students may struggle with strategic and organizational abilities, have language barriers, etc. and will demonstrate their mastery very differently. Multiple means of **action** and **expression** provide a variety of ways for students to demonstrate what they have learned—ways like multiple choice tests, group projects and oral presentations.

www.cast.org

Multiple Means of Engagement – the “Why” of Learning

This principle is based on the brain’s affective dimensions. Students differ markedly in the ways in which they can be **engaged** or **motivated** to learn. Some may desire strict routines and predictable activities while others are highly engaged by spontaneity and novelty.

Multiple means of engagement offer solutions to the problem so often faced by students – a lack of motivation to learn due to the obstacles posed by their learning difficulties.

- Instead of watering down the curriculum to assist students with basic skill deficits such as reading, a UDL designed curriculum offers **multiple ways to provide novelty** in the learning environment and allows teachers to alter the design based on the student’s particular learning strengths and weaknesses **while maintaining learning expectations**.
- www.cast.org

Universal Design for Learning Guidelines

I. Representation

Use multiple means of representation

1. Provide options for perception

- Options that customize the display of information
- Options that provide alternatives for auditory information
- Options that provide alternatives for visual information

2. Provide options for language and symbols

- Options that define vocabulary and symbols
- Options that clarify syntax and structure
- Options for decoding text or mathematical notation
- Options that promote cross-linguistic understanding
- Options that illustrate key concepts non-linguistically

3. Provide options for comprehension

- Options that provide or activate background knowledge
- Options that highlight critical features, big ideas, and relationships
- Options that guide information processing
- Options that support memory and transfer

II. Expression

Use multiple means of expression

4. Provide options for physical action

- Options in the mode of physical response
- Options in the means of navigation
- Options for accessing tools and assistive technologies

5. Provide options for expressive skills and fluency

- Options in the media for communication
- Options in the tools for composition and problem solving
- Options in the scaffolds for practice and performance

6. Provide options for executive functions

- Options that guide effective goal-setting
- Options that support planning and strategy development
- Options that facilitate managing information and resources
- Options that enhance capacity for monitoring progress

III. Engagement

Use multiple means of engagement

7. Provide options for recruiting interest

- Options that increase individual choice and autonomy
- Options that enhance relevance, value, and authenticity
- Options that reduce threats and distractions

8. Provide options for sustaining effort and persistence

- Options that heighten salience of goals and objectives
- Options that vary levels of challenge and support
- Options that foster collaboration and communication
- Options that increase mastery-oriented feedback

9. Provide options for self-regulation

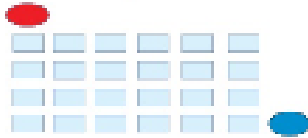
- Options that guide personal goal-setting and expectations
- Options that scaffold coping skills and strategies
- Options that develop self-assessment and reflection

What Are We Already Doing?

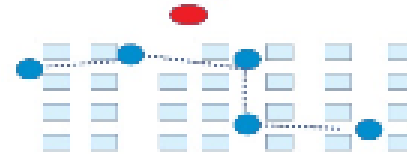
- Choices/Options
- Previewing - Vocabulary
- Flexible Groupings
- Graphic Organizers
- Brain-based Teaching Strategies

Co-Teaching Approaches

ONE TEACH, ONE OBSERVE



ONE TEACH, ONE ASSIST



STATION TEACHING



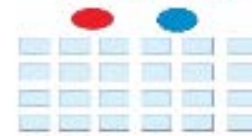
PARALLEL TEACHING



ALTERNATIVE TEACHING



TEAMING



Graphic Organizer Examples

KWL

Timeline











Chart in Word

Word Web

Story Map

Flow Chart

Venn Diagram

The Bill of Rights	The first ten amendments (changes) to the Constitution	Protects the people from government having too much power
First Amendment		Freedom of religion
		Freedom of the press
		Freedom of speech
		Freedom of assembly
Second Amendment		Right to bear arms
Third Amendment		Citizens do not have to have soldiers live in their homes
Fourth Amendment		Protects citizens from unreasonable search and seizure
Fifth Amendment		Citizens cannot be tried twice for the same crime
Sixth Amendment		Right to a fair trial with a jury of peers
Seventh Amendment		Trial by jury for disputes over \$20
Eighth Amendment		No cruel or unusual punishment; no excessive bail
Ninth Amendment		Rights of the people cannot be denied by the Constitution
Tenth Amendment		Powers not delegated in the Constitution to the US government are granted to the states or the people

<http://www.eduplace.com/graphicorganizer/>

Brain-based Learning

You have experience with brain-based learning strategies like:

- Brainstorming and Discussion
- Drawing, Artwork
- Field Trips
- Games
- Graphic Organizers, Word Webs
- Humor
- Manipulatives, Experiments, Models
- Metaphors, Analogies
- Mnemonic Devices
- Movement
- Visuals
- Music, Rhythm, Rhyme, Rap
- Project-based and Problem-based Instruction
- Reciprocal Teaching and Cooperative Learning
- Role Plays, Drama, Pantomines, Charades
- Storytelling
- Technology
- Visualization and Guided Imagery
- Work Study and Apprenticeship
- Writing and Journals

Worksheets Don't Grow Dendrites!

Dr. Marcia Tate

What Learning is Central to the Standard?

- For recognition goals, focused on *specific content*, that **content** is key.
- For strategic goals, focused on a *specific process or medium*, that **process** or medium is key.
- For affective goals, focused on a particular value or emotional outcome, that **emotional outcome** is key.

Examples of Standards

- Describe the westward movement, including the emerging concept of manifest destiny
- Uses organizational structures for conveying information (Chronological order, cause and effect, similarities and differences, etc.)
- Reads familiar text with expression

Let's Look More Closely

Dr. Kathie Nunley's Layered Curriculum ... The Nature of Biology

Level C: (15 points) - must complete the required and the points for each section

Required	Due	Possible	Initial	Earned
1. ♥ Read chapter and turn each of the learning objectives into questions and then answer them		0-10		
2. ♥ 1, 2 Flashcards: Vocabulary Chapter 6 (peer pick 10 to questions on)		0-10		
Section 1: Choose one assignment from the assignments marked with an X		Possible	Initial	Earned
3. ♥ Listen to the lecture on "Patterns of Inheritance"		0-15		
4. X Do the Activity "Building Babies" with a partner				
5. X Sketch a drawing that compares the vocab words for this section				
6. X Make a power point about this section. 6 Clip Minimum (email or save on "S" Drive)				
7. ♥ Take Section 1 Quiz				
Section 2: Choose two assignments from the assignments marked with an X		Possible	Initial	Earned
8. ♥ Listen to the lecture on "Principles of Inheritance"		0-20		
9. X Create a collage comparing Mendel's Laws				
10. X Do the Lab Zone "Think about it" on page 133				
11. X Do the Lab Zone "Do it" on page 137				
12. ♥ Take Section 2 Quiz				
Section 3: Complete all three assignments		Possible	Initial	Earned
13. ♥ Listen to the lecture on "Genetics and Predications"		0-10		
14. ♥ Do the worksheet "Finding Phenotypes and Genotypes for One Trait"				
15. ♥ Take Section 3 Quiz and receive at least 80%				
Section 4: Complete all four assignments		Possible	Initial	Earned
16. ♥ Listen to the lecture on "Predications and People"		0-10		
17. ♥ Do the worksheet "Observing Human Traits"				
18. ♥ Go to the library on March 17 (happy St. Patty's Day) and do the computer software.				
19. ♥ Take Section 4 Quiz				

♥ Indicates REQUIRED assignments

Points Earned ____/75

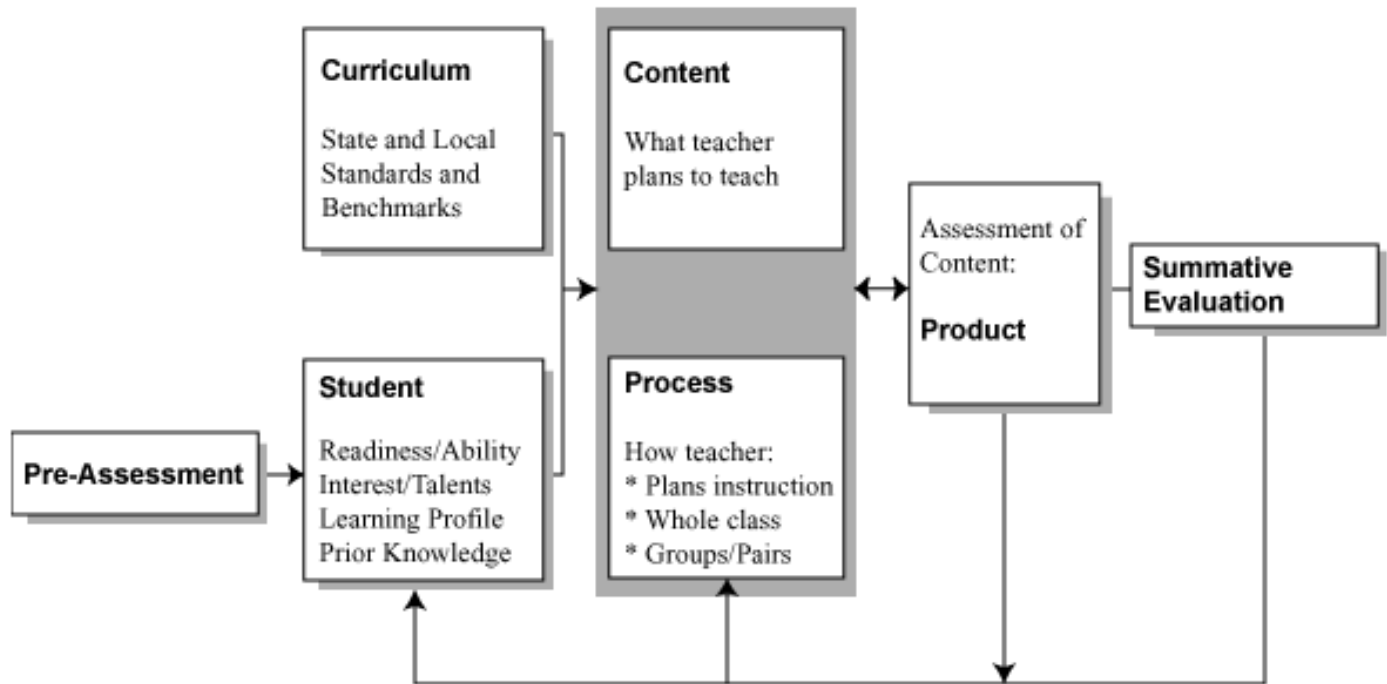
Differentiation or UDL?

Three elements of the curriculum that can be differentiated:

- Content
- Process
- Products

Differentiated instruction, according to [Carol Ann Tomlinson](#) (as cited by Ellis, Gable, Greg, & Rock, 2008, p. 32), is the process of “ensuring that what a student learns, how he/she learns it, and how the student demonstrates what he/she has learned is a match for that student’s readiness level, interests, and preferred mode of learning”.

Differentiation



(adapted from Oaksford, L. & Jones, L., 2001)

Figure 1. Learning Cycle and Decision Factors Used in Planning and Implementing Differentiated Instruction



Differentiation of Classroom Tasks

Vocabulary

Previewing Activities

Word Study

Reading

Fluency

Comprehension

Note-taking

Test-taking

Writing Assignments

Considerations

- Clarify key concepts and generalizations (the foundations of future learning – Essential Questions)
- Engaging all learners is essential
- Provide a balance between teacher-assigned and student-selected tasks
- Emphasize critical and creative thinking as a goal in lesson design
- Use assessment as a teaching tool to extend rather than merely measure instruction

Assistive Technology and UDL

Flexible technologies are made available to all students as needed, rather than there being a requirement for an IEP and plan for AT.

For some students, individual solutions will still be required.

For students with IEPs, AT needs to be documented.

AT Can Help By:

1. Providing a barrier-free environment for student learning
2. Delivering content in different ways
3. Giving students varied processes to work with the content
4. Allowing for varied products to demonstrate learning
5. Engaging students in learning activities

Low Tech Tools for All

Low Tech AT Toolkit

One in each school

AT available to all students

Check out AT to try

Replace it if it helps the student and they want to keep it

Complete listing of example contents at
www.center4ATexcellence.com

Low Tech Tools for All

Reading – reading guide, highlighter tape, colored filters

Writing – adapted pens and pencils, grips, various papers, slantboard

Math – adapted rulers, number lines and counters, graph paper, calculators, adapted clocks, flexitables

Organization – fidgets, scheduler, desk clamp, timers, weighted vest, vibrating watch

UDL Technology Tools

- Mid Tech
 - Calculators
 - Math Manipulatives
 - Handheld Dictionaries
 - Digital recorder
- High Tech
 - Screen Reading with Highlighting
 - Talking Word Processing with Word Prediction
 - Online Math Problem Solving

Accessible Instructional Materials

What are AIMs?

- Printed instructional materials in alternate formats – Large print, Braille, digital text, audio recording

Who Qualifies?

- Those who are physically disabled, visually impaired, or have an organic text disability

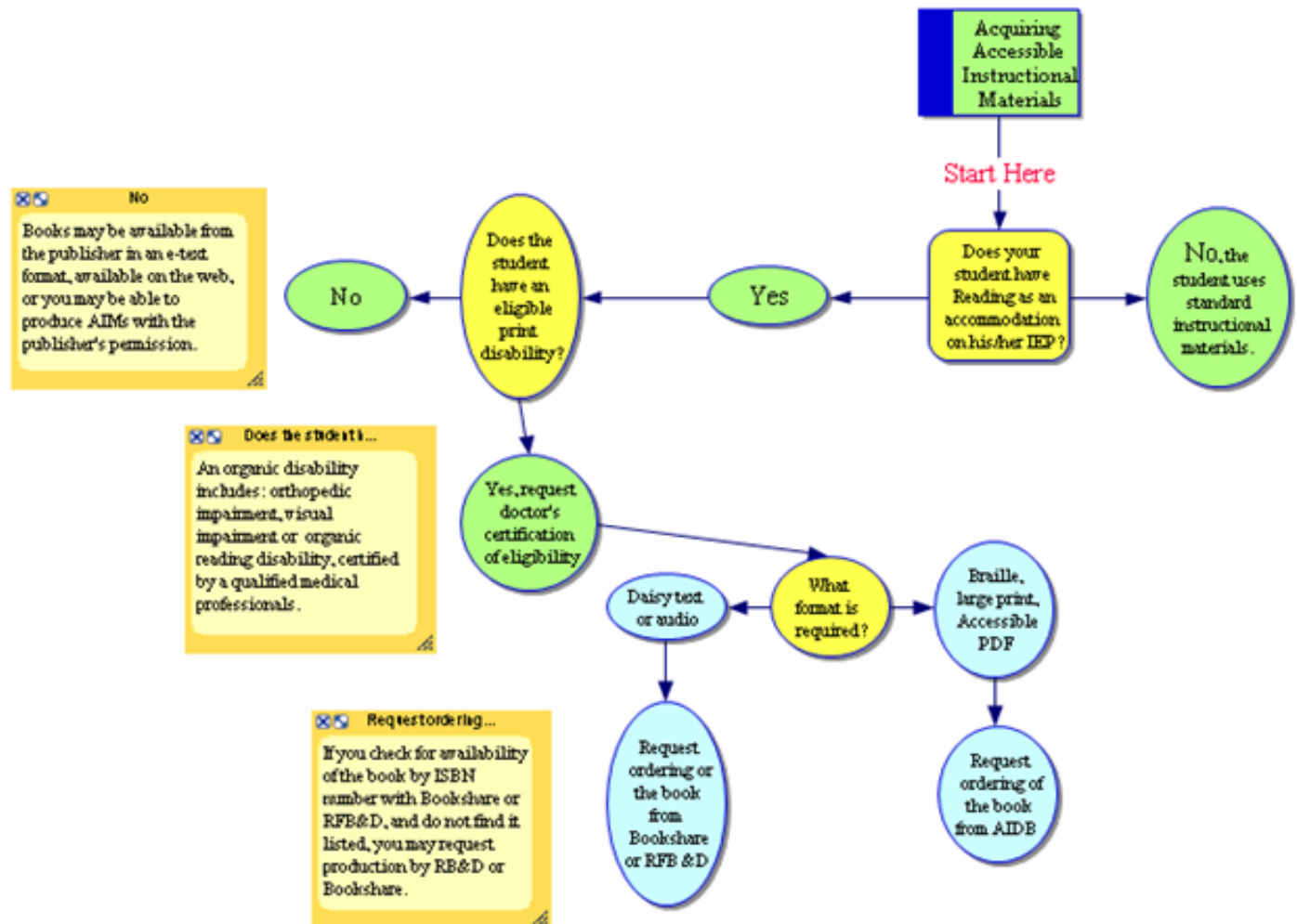


Accessible Instructional Materials

What about students who do not qualify for AIMS but have reading as an accommodation on their IEP?

Still have to provide FAPE!

Accessible Instructional Materials



AIMs

Accessible Instructional Materials from the Bookshare.org for registered students; NIMAC (in Georgia, GIMC) provides e-text in various formats, large print, Braille for registered students

Some manufacturers provide accessible formats online or for purchase

Learning Ally (RFBD) – recordings with human voice

School districts may create their own AIMS

AIMs in Georgia

Georgia Instructional Materials Center (GIMC)

Jim Downs

jdowns@doe.k12.ga.us

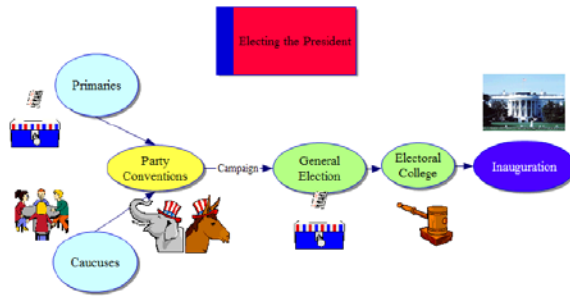
Registration and materials request are
handled online

Commercial Software Examples

- IntelliTools Classroom Suite
- Clicker 6
- SOLO
- Kurzweil 3000
- TextHELP Read and Write Gold
- WriteOnLine
- Ginger

Commercial Software Examples

IntelliTools Classroom Suite



Classroom Suite - Prefixes practice


"Mis"- means "wrong"
"Un"- means "not"
"Re" - means "back or again"
"Sub" - Under

Find the words with the prefixes in the following sentences and underline the words.

1. The students will return to school after summer vacation.
2. The submarine will resurface after its mission.
3. Please rewind the tape when you are finished.
4. Unlock the door and go right in.
5. I have misplaced my keys.
6. These socks were mismatched.
7. The hem of this dress is uneven.
8. Her temperature is subnormal.
9. Let's replay that movie.
10. The order was mishandled so we will have to rework it.

Classroom Suite - Nouns

Put the word with the picture for these nouns.



dog house car banana tree newspaper bed shirt

Classroom Suite - Addition to 20

Addition to 20

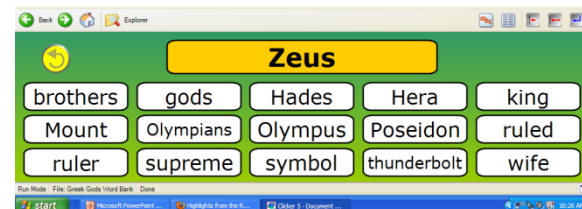
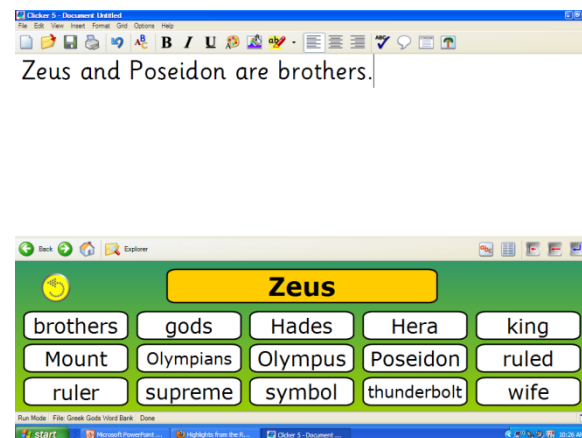
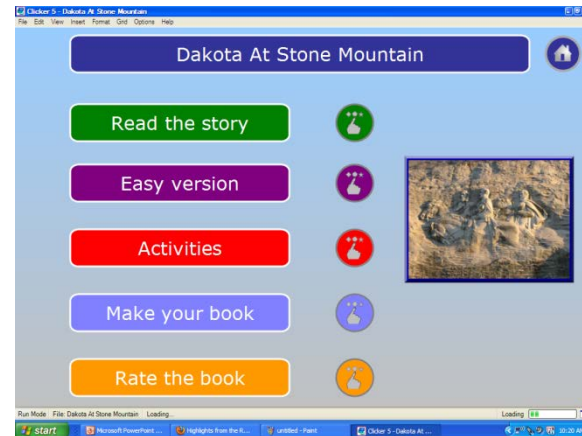
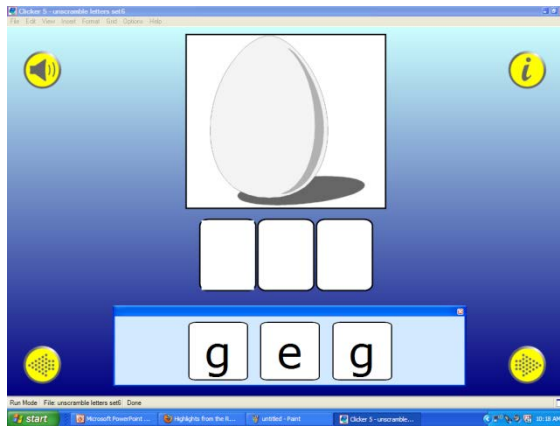
10 + 2 = 12 GO!

0 5 10 15 20

1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20

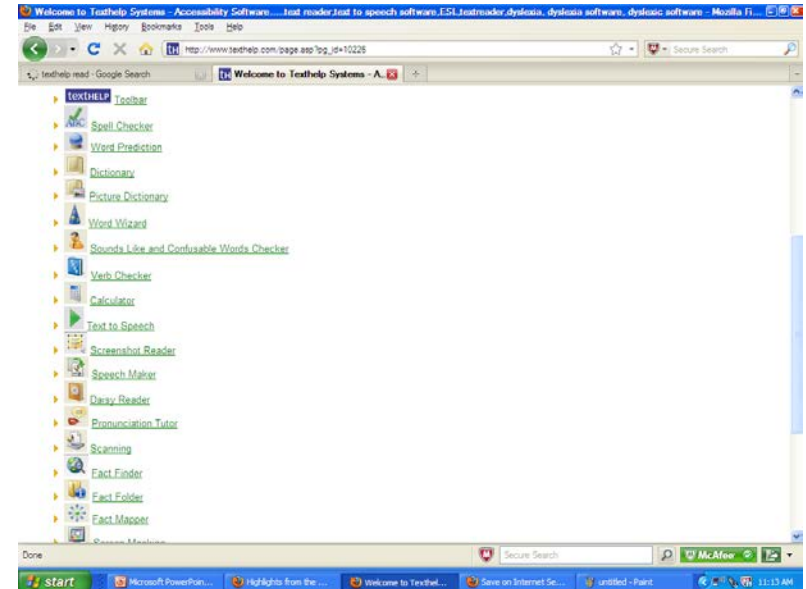
Commercial Software Examples

Clicker 5/WriteOnline

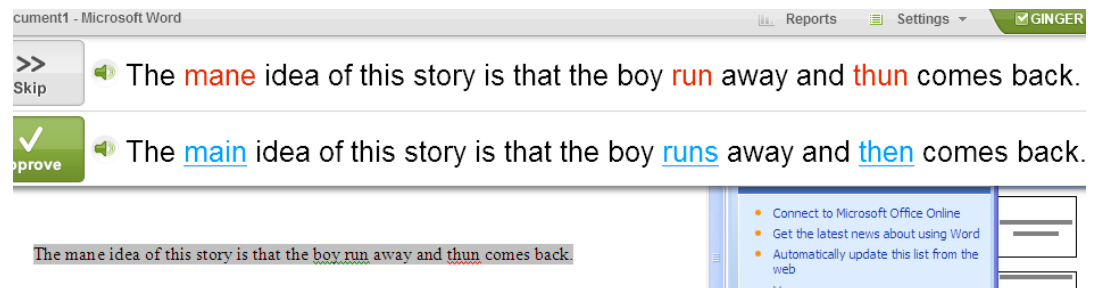


Commercial Software Examples

TextHELP
Read and Write
See Video Tour

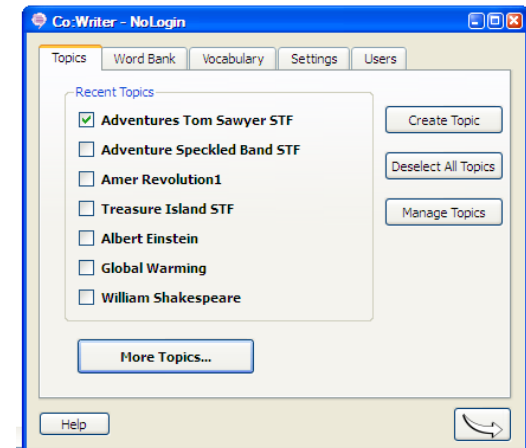
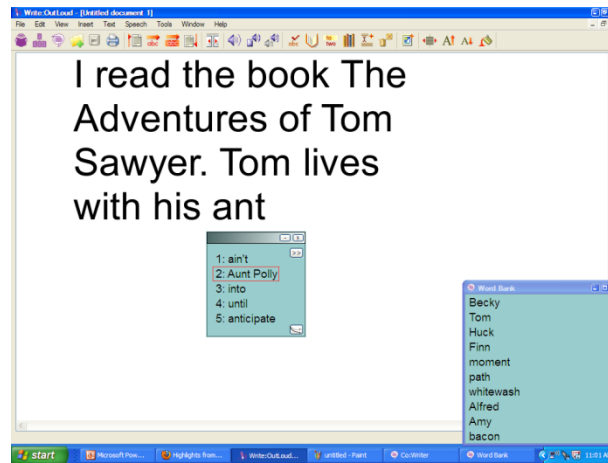
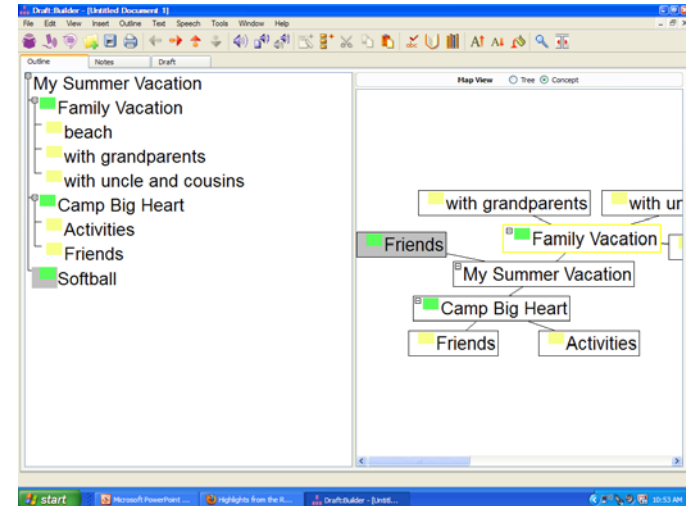
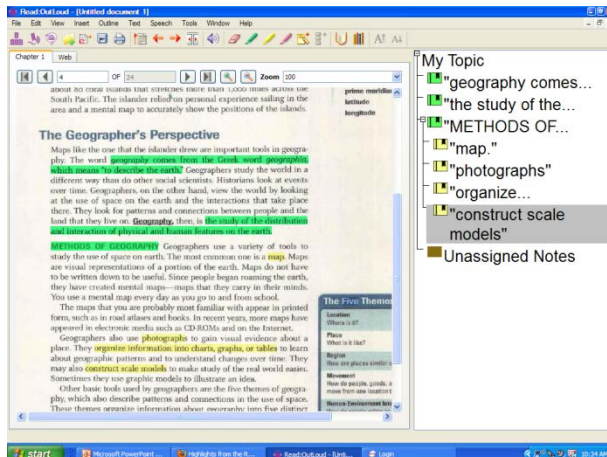


Ginger



Commercial Software Examples

SOLO



Freeware and Apps

MyStudyBar



MindMap (X-Mind)

Screen Masking (T-Bar)

Screen Ruler (Vu-Bar)

Speaking Dictionary (Lingoes)

Word Prediction (Let Me Type)

Talking Word Processor (Balabolka)

Cursor Ring

Screen Magnifier

Screen Reader (Thunder)

Text Reader (Orato)

www.rsc-ne-scotland.ac.uk/eduapps/mystudybar.php

Freeware and Apps

www.UDLtechtoolkit.wikispaces.com

has the best listing we have found of
AT freeware.

Please evaluate us:

Please fill out this brief survey on today's
webinar:

<http://www.surveymonkey.com/s/L6FBG2N>

Contact us:

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