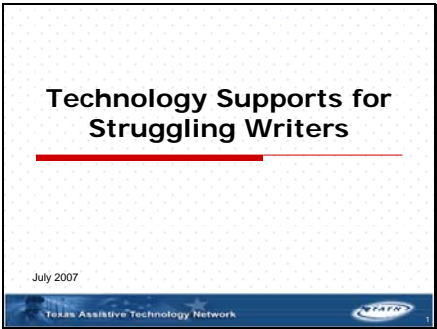


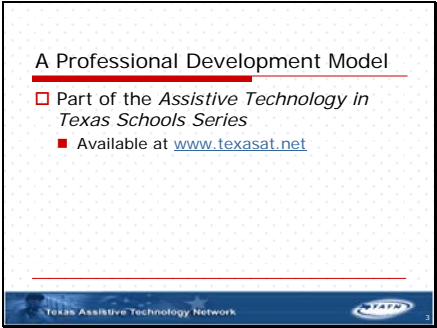
Slide 1



Slide 2



Slide 3




Slide 4

Objectives

Participants will learn about:


- A framework for the writing process
- Research-based, technology supported strategies to assist struggling students
- Available technology resources that will assist those struggling writers

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Slide 5

Instructional vs. Compensatory Interventions


Instructional Interventions: <ul style="list-style-type: none">■ Increase student's performance through adding skills to the student's own skill base	Compensatory Interventions: <ul style="list-style-type: none">■ Provide a means to complete a task such that, without the intervention, a student would not be able to complete the task at the expected level■ Increase performance without necessarily increasing the skill base of the student■ Are uniquely matched to the student's characteristics and needs
--	---

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Please note:

- This module and the interventions address technology supports for the writing process, rather than the mechanics of writing.


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Slide 7

Characteristics of Writers

*“Writing well is not just an option for young people – it is a necessity. Along with reading comprehension, writing is a predictor of academic success and a basic requirement for participation in civic and life and a global economy...Because the definition of literacy includes both reading and writing skills, poor writing proficiency should be recognized as part of this national literacy crisis.”
(Graham & Perin, 2007)*


Characteristics of struggling writers...

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Characteristics of Skilled Writers *Activity Part 1*

- Think of students with whom you have worked that you would consider to be skilled writers...
 - What specific skills did these writers demonstrate?
 - What made their writing 'good'?

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Brainstorm Struggling Writer Characteristics *Activity Part 2*

Brainstorm some of the characteristics of struggling writers:

To get you started...

- Amount of content
- Organization of content
- Planning of materials


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Struggling Writers Characteristics

Difficulty with...

- Adding detail
- Word choice
- Handwriting/mechanics
- Identifying errors
- Correcting errors
- Fluency




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Struggling Writers Characteristics:

Do not see themselves as writers, therefore...

- Lack procedural knowledge about the writing process
- Have difficulty selecting topics and generating ideas





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Struggling Writers Characteristics:

- Are unaware of writing for an audience
- Write to put words on paper - not writing for meaning
- Need strategies to self assess their own work




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Effective Writing Instruction for Struggling Writers


- Provides a classroom climate that motivates students to write
- Emphasizes the writing process
- Provides specific instruction & strategies to meet their needs
- Continually monitors student progress

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Slide 14

Create a Classroom Climate that Motivates Students


- Invite students to learn
- Provide sufficient time with quality, needs-based instruction
- Support student learning through scaffolded instruction
- Base all instruction on the TEKS

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Using the Writing Process Model


- Shifts emphasis from a *product-driven* to a **process-driven** approach
- Demonstrates & reinforces the process all writers use as they write
- Provides a basis for effective writing instruction
- Helps develop positive attitudes towards writing

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Using the Writing Process with Struggling Writers


- Allows students to be involved in writing regularly, for meaningful purposes and real audiences
- Focuses on meaning first, then skills in the context of meaning
- Accommodates differentiated instruction which allow students to work at their own level and pace
- Involves collaboration during peer:peer & teacher:student conferences

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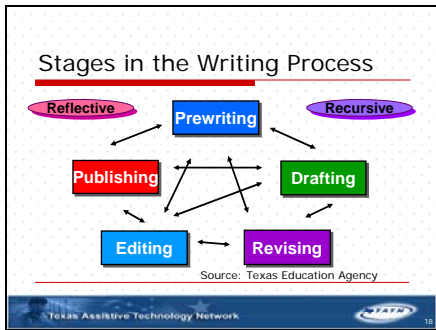
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Using the Writing Process with Struggling Writers

- Provides opportunities for generalization and transfer of learning
- Gives students control of their writing
- Helps establish independent problem-solvers
- Most importantly, **using the writing process creates writers**

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Important Considerations...

Strategies for Teaching Tool Use


- An effective instructional sequence would include:
 - **Explanation** with problem definition
 - **Modeling** with interactive teaching
 - **Guided practice** with substantive facilitation
 - **Independent use** with teacher conference

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Evidence of Effectiveness

- No one feature provides all the support needed by struggling writers
 - All features do not affect all writing variables directly
- Effectiveness is affected
 - By the writer's basic skill levels
 - By the writer's operational competence with the tool


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Prewriting




"Planning and organizing"

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Planning & Organizing


- Establish a purpose for writing (the writing task)
- Select a topic and identify the intended audience
- Generate ideas
- Organize ideas according to text structure

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Knowledge & Strategies Used in Prewriting by Competent Writers


- Knowledge of text structures
- Strategies for generating topic and ideas
- Strategies for organizing ideas

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Technology for Prewriting Can Also Provide **Activity**


- Reminders of
 - What** information or elements must be present (e.g., goal, topic, text elements, ideas, details, etc)
- Assistance with
 - How to** generate, select and/or organize information or elements

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Effective Features of Tools Supporting Prewriting


- Provides prompts related to the:
 - **Purpose** of the composition (e.g., to tell a story, to explain, to compare, etc.)
 - **Structure** of the composition (e.g., introductory sentence, support details, concluding sentence, etc.)
 - **Genre** of the writing (e.g., the five elements of a story)
- Prompts may take the form of:
 - Instructions
 - Questions

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Effective Features of Tools Supporting Prewriting

- Use of visual-graphic mapping tools to:
 - Organize groups of information (charts, maps or web)
 - Enhance representation of logical sequencing
 - Ordinate relationships
- Record and manipulate ideas
- Produce a printed plan for the student follow
- Produce digital files which guide the student's writing
- Provide text-to-speech support

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Technology Supports for Struggling Writers

See handout




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Tools to Explore:
No Tech / Low tech


- Graphic organizers
- Writing checklists
- Digital planning & organizational tools
- Digital mapping tools

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Graphic Organizers


- Prewriting supports
 - Provides a means to organize thoughts
 - Can assist in the organization of form (e.g., creating a paragraph)
 - Creates a reference through the writing process

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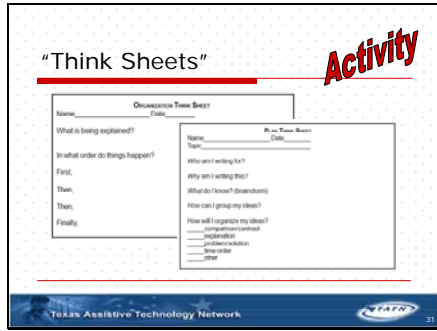
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Writing Checklists

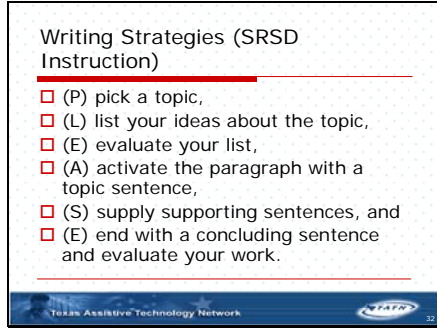
- Prewriting supports
 - Provide prompts relating to purpose, structure, and/or genre of composition
- Revision and/or editing supports
 - Provide prompt relating to word choice, content, and/or conventions used in the composition

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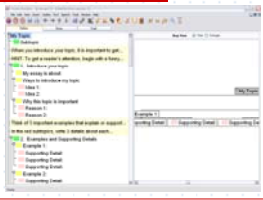
Tools to Explore


- Draft: Builder
- Kidspiration/Inspiration
- Writer's Companion
- NEO
- ndxCARDS

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Draft: Builder




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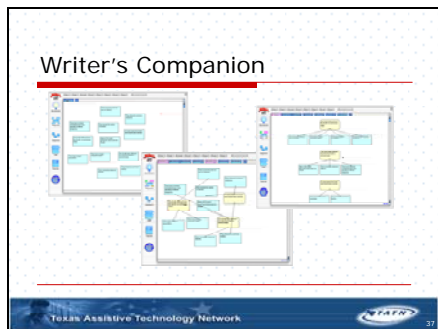
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Kidspiration/Inspiration



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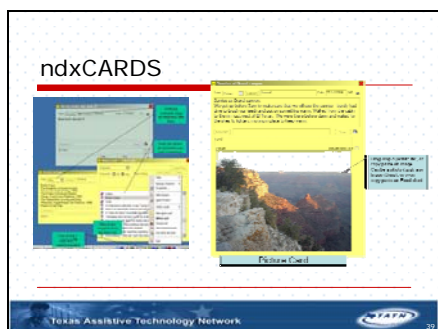
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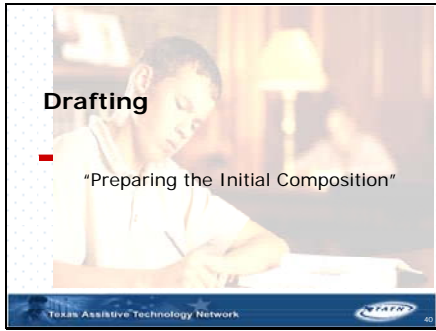
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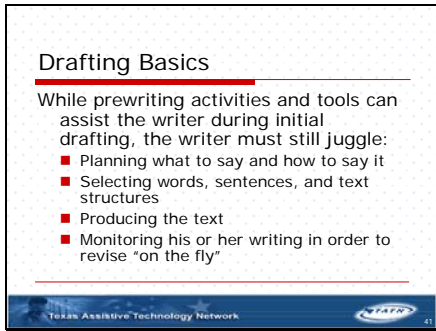
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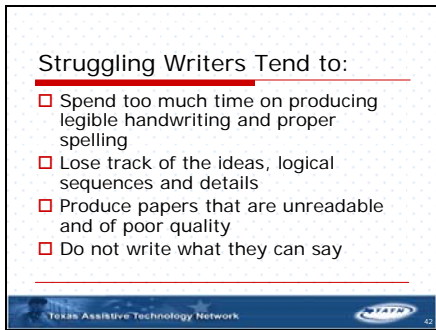
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Important thing to consider....

Is Faster Better?

- The goal of writing support: Increase the "productivity" of the writer
- Productivity in AT has been defined as


$$\frac{\text{Quantity} + \text{Quality}}{\text{Time}}$$

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Productivity Increases


- When in the same time or more time,
 - Legibility, spelling accuracy, capitalization, punctuation increases
 - The variety of words increases
 - The number of words or sentences written increases
 - The number or quality of ideas, details, text elements improves

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Effective Features of Tools Supporting Drafting


- Ability to..
 - Create print via a keyboard
 - Provide word cues
 - Provide word prediction
 - Create text via speech recognition
- Access to..
 - Spell check
 - Text to speech supports

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Types of Tools for Drafting Support


- ❑ Drafting & planning tools
- ❑ Keyboard text entry tools
- ❑ Word cue tools
- ❑ Word prediction tools
- ❑ Speech recognition tools

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Digital Planning & Organization Tools


- ❑ Drafting Supports
 - Word or phrase “ideas” from prewriting can serve as sentence starters or provide vocabulary for drafting
 - Digital outline files can be used to generate a first draft when more extensive written information was produced during planning & organization
 - Drafting support can be done through ‘copy and paste’ or ‘click and drag’ or an ‘auto create’ function

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Keyboard Text Entry


- ❑ Drafting Supports
 - Provide support in legible print production
 - May have text-to-speech support
 - May have grammar check support
 - May provide automatic capitalization and spelling correction
 - May provide word cues

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Keyboard Text Entry


- Drafting Supports
 - In general, operational competence of students affects impact of word processing on writing
 - Functional rates of word production can be obtained, especially when keyboarding instruction is provided
 - Compositional length is increased with prior experience or instruction in WP or keyboarding

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Keyboard Text Entry


- Drafting Supports
 - Initial student skill levels affect outcomes
 - Students with higher initial spelling errors improve more in draft accuracy than do those with low initial rates
 - Students with low initial composition length when handwriting (<50 words) write longer compositions using the word processor

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Word Cues


- Drafting Supports
 - Used with keyboard text entry
 - Present lists of words or phrases
 - Lists are generated from word dictionaries
 - Dictionaries vary type and size from small single lists to large multiple lists
 - Additional feature
 - Customizable to add topic-specific lists or lists of "trouble" words

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Word Prediction


- Drafting Supports
 - Dynamically changes the lists as more letters are typed
 - Produce lists of words using
 - Word frequency
 - Recency of use
 - Grammatical correctness
 - Commonly associated words and phrases


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Speech Recognition

- Drafting Supports
 - Permits drafting by dictation
 - Allows production of legible print
 - May have text to speech support




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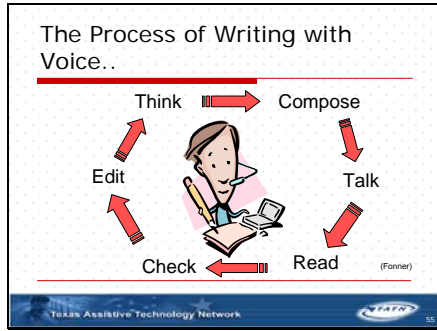
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Speech Recognition Requires...

- Training process to “learn” the student’s voice
- Consistent voice pattern
- Understanding the process of writing

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- Effectiveness of Speech Recognition
- Limited evidence base
 - Recognition accuracy may reach only 90% after sustained training
 - Frustration with correction process may lead to rejection or abandonment
 - Outcomes on writing
- Texas Assistive Technology Network TATN 56

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Technology Supports for Struggling Writers – Participant Note-taking Guide

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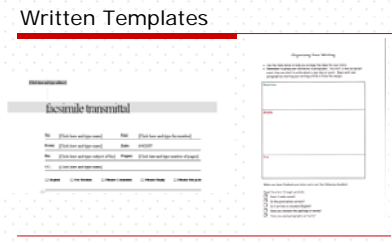
Tools to Explore:
No Tech / Low tech


- Written Templates
- Word Cards / books / wall

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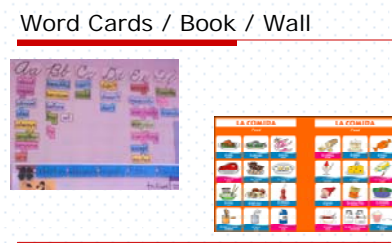
Written Templates




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Word Cards / Book / Wall

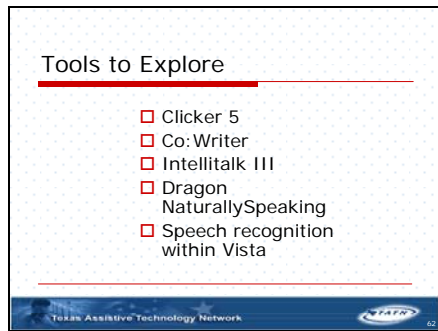


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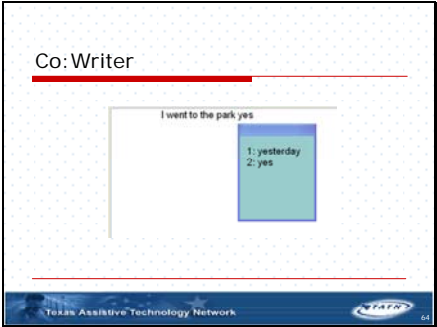
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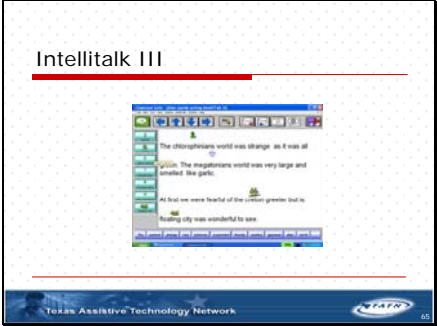
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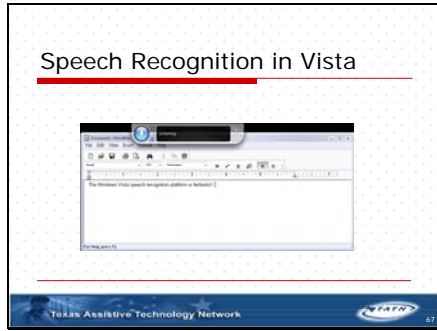
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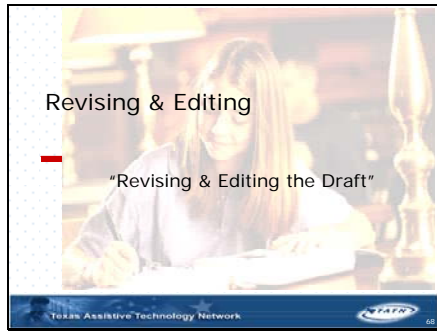
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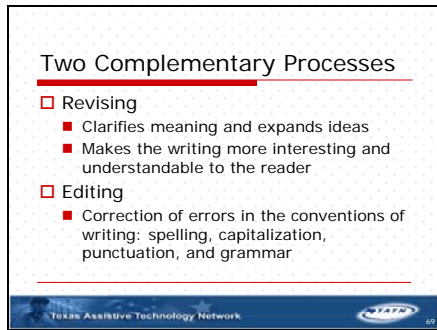
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Effective Features of Tools Supporting Revising

Assist the writer to:

- Review sentences for meaning
- Review passages and paragraphs for:
 - Detail and interest
 - Clarity and logic
 - Content elements
- Make revisions


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Effective Features of Tools Supporting Revising

Reviewing meaning


- Screen display of legible text
- Text-to-speech voice output
 - Sentences, paragraphs, entire composition
- Review prompts
 - Content prompts
 - Procedural prompts (instructions or questions)

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Effective Features of Tools Supporting Revising


- Word-level revisions
 - Dictionaries, word lists
 - Thesaurus
- Sentence and paragraph-level revisions
 - Text insertion, deletion, and movement

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Effective Features of Tools Supporting Revising


- Facilitating the detection of errors
 - Screen display
 - Text-to-speech voice output
- Signaling the presence of an error
 - Visual signals
 - Auditory signals
- Providing options for correction
 - Lists of possible corrections
 - Voice output review of options

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Effective Features of Tools Supporting Revising


- Automatic detection and correction of errors during transcription
 - Auto-correction of common spelling errors
- Auto-prevention of errors during transcription
 - Auto-insertion of capitalization & spacing
 - Auto-insertion of correct grammatical form in word lists

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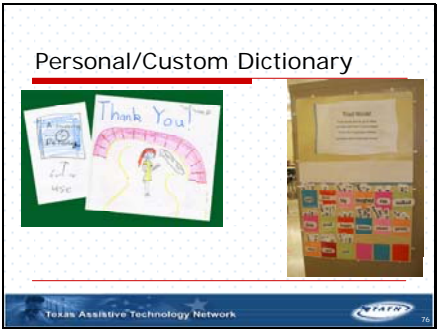
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**Tools to Explore:
No Tech / Low tech**

- Personal / Custom Dictionary
- Highlighter Pens/Tape

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Tools to Explore


- Speaking Dictionary and Thesaurus
- Texthelp Read and Write Gold
- WYNN

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Speaking Dictionary/Thesaurus




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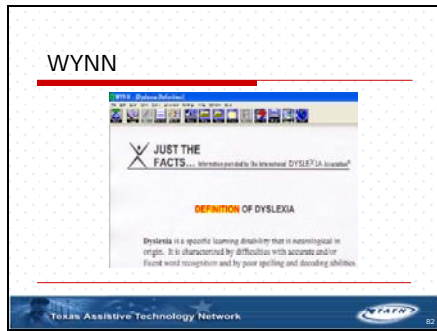
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Texthelp Read and Write Gold

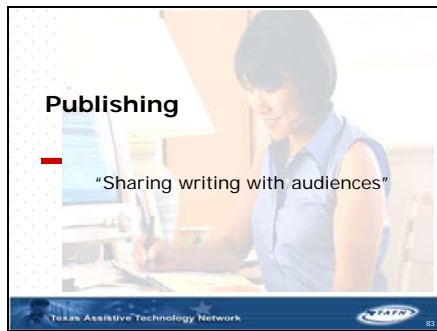


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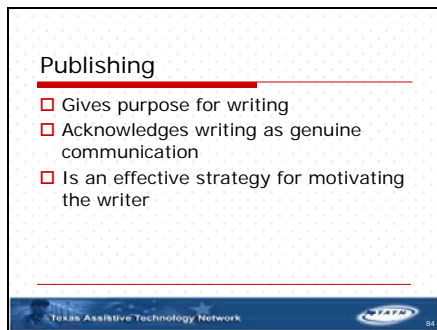
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Effective Features of Tools Supporting Publishing

- Provide formatting options to improve interest, clarity or organization
- Provide layout options appropriate to writing genre
- Provide for the insertion of illustrations, graphics, graphs, etc
- Provide for sharing of writing
 - Among peers
 - Among other audiences

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Technology Supports for Struggling Writers




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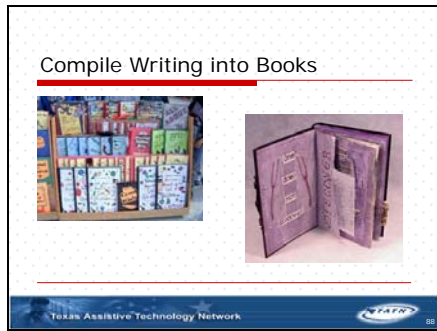
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**Tools to Explore:
No Tech/Low tech**

- Compile writings to create a book
- Tape recorder

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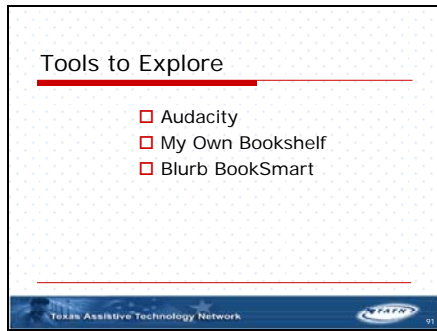
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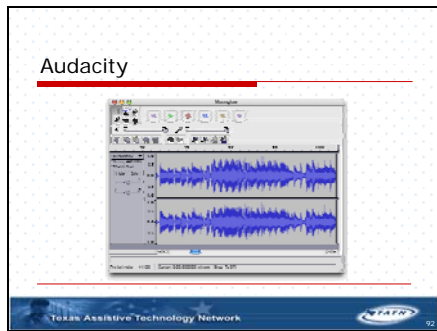
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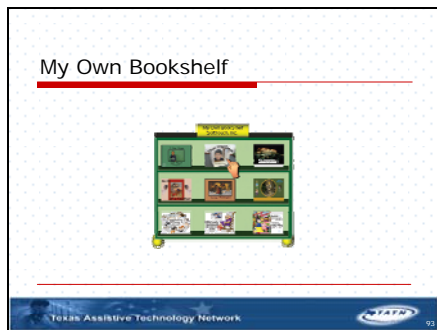
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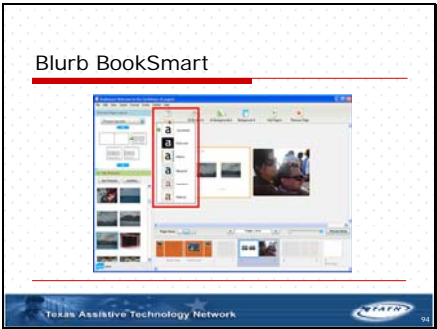
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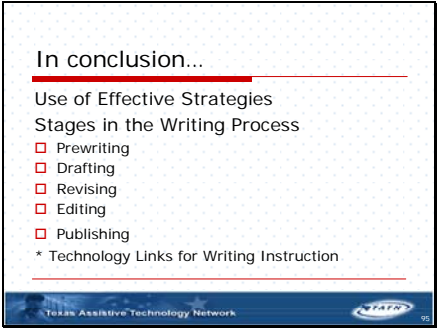
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