Combining Digital Literacy and Writing Process Instruction to Foster Language Development (K-12)

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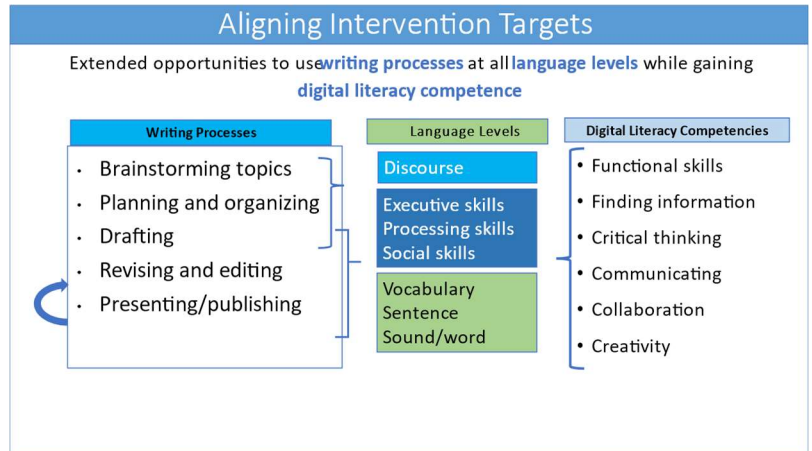
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Outcomes

- List elements of digital literacy that can be targeted in a writing lab approach.
- Match digital features to associated writing processes and language targets.
- Plan curricular projects to help students in grades K-12 acquire digital literacy competencies while developing higher level language, literacy, and communication skills.

Notes from PPT slides

- **Digital Literacy Competencies** that can be targeted with a writing lab approach
  - Functional skills
  - Finding and evaluating information – taking notes
  - Critical thinking
  - Communicating
  - Collaboration
  - Creativity
- **Writing Lab Approach – 3 major components**
  - **Writing processes** as a context for curricular *instruction* and language *intervention*
  - **Inclusive classroom-based** collaborative individualized intervention
  - **Computers** for all stages of the writing process
- **Writing Lab logistics**
  - Inclusive, collaborative, individualized – Combines **instruction** and **intervention**
  - 2 to 3 days a week, teachers and SLPs side-by-side
  - Use curricular assignments (include special needs students for all instruction)
- How to start when combining Instruction & Intervention to target Writing processes, Language skills, Computer literacy
  - Collect and analyze baseline writing probes (handwritten)
  - Set baselines. and targets
    - Discourse level
    - Sentence level
    - Sound/word level
    - Self-regulation and social interaction using writing processes
  - Plan a curriculum-based project to work on over multiples sessions in collaboration with teacher, using all writing processes and including **digital literacy learning opportunities**
  - Work on
    - Curriculum goals, including writing processes
    - Individual language/literacy objectives
    - Digital literacy goals

- Align Intervention Targets
  - Writing Processes
    - Brainstorming
    - Planning and organizing
    - Drafting
    - Revising and editing
    - Presenting/publishing
  - Language Levels
    - Discourse organization
    - Executive, processing, social skills
    - Vocabulary
    - Sentence
    - Sound/word
  - Digital Literacy Competencies
    - Functional skills
    - Finding information
    - Critical thinking
    - Communicating
    - Collaboration
    - Creativity

Aligning Intervention Targets

Extended opportunities to use **writing processes** at all **language levels** while gaining **digital literacy competence**

Writing Processes	Language Levels	Digital Literacy Competencies
· Brainstorming topics · Planning and organizing · Drafting · Revising and editing · Presenting/publishing	Discourse Executive skills Processing skills Social skills Vocabulary Sentence Sound/word	· Functional skills · Finding information · Critical thinking · Communicating · Collaboration · Creativity

- **Digital Literacy Functional Skills** can be targeted in all stages of the writing process
  - Planning supports
    - Graphic organizing and Mind Mapping software
    - Clipart (e.g., Sturm's "First Author")
    - Research for report writing
  - Drafting, revising, editing tools
    - Spell check
    - Insert new text
    - Cut-and-paste
    - Use page-reader feature
  - Publication/presentation/collaboration features
    - Fonts, borders, illustrations
    - Presentation software
    - Writing with a partner in shared docs
- **Curriculum Applications**
- Target language and literacy learning **AND Digital literacy competencies**
  - Targeting digital literacy in *About the Author* projects
  - Expository Text Macrostructure
    - Hierarchical/descriptive: Superordinate - Subordinate
    - Procedural sequence: [1] details   [2] details   [3] details
    - Comparison/contrast: different – same - different
    - Antecedent → Consequence
- Curriculum Activity for Grade 3 student with DLD: *Animal Essay*

Classroom lessons for Jacob (age 8)
  - Vocabulary
    - Animal choice
    - Digital literacy concepts – entering key words
  - Graphic organizer – use questions to help find key words
  - Find information – read to see if it answers questions
    - *What does that mean?*

- *What does the author want us to know?*
- Take notes:
  - *Read it*
  - *Cover it or darken the screen*
  - *Say it in your own words*
- Organize notes (critical thinking)
  - *What goes with that?*
  - *Is there anything else we should tell the reader?*
- Author chair
  - Read draft
  - Call on peers to comment and question
  - Use input to add information

Take Home Points
- Multiple digital literacy skills can be targeted in a writing lab approach using curriculum-based projects that are age, cognition, and grade appropriate.
  - Functional skills
  - Finding and evaluating information – taking notes
  - Critical thinking
  - Communicating
  - Collaboration
  - Creativity
- All stages of the writing processes can be supported with digital literacy skills
  - Planning and organizing
  - Drafting
  - Revising and editing
  - Presentation and publication
- All language levels, reading, writing, and oral communication skills can be targeted in tandem with digital literacy skills.

REFERENCES

Bahr, C. M., **Nelson**, N. W., Van Meter, A., Yanna, J. V. (1996). Children's use of desktop publishing features: Process and product. *Journal of Computing in Childhood Education, 7*(3/4), 149-177.

Bahr, C., **Nelson**, N. W., & Van Meter, A. (1996). The effects of text-based and graphics-based software tools on planning and organizing of stories. *Journal of Learning Disabilities, 2*, 355-370. This article also appears in a monograph, *Technology for students with learning disabilities: Educational applications*, with a print version and additional annotative text in a digital version. Austin, TX: Pro-Ed.

Nelson, N. W. (2014). Classroom based writing assessment. In C. A. Stone, E. R. Silliman, B. J. Ehren, & G. P. Wallach (Eds.), Handbook of Language and Literacy: Development and Disorders (2nd ed.). (pp. 524-543). NY: The Guilford Press.

Nelson, N. W. (2014). Integrating language assessment, instruction, and intervention in an inclusive writing lab approach. In B. Arfé, J., Dockrell, & V. Berninger (Eds.), Writing development in children with hearing loss, dyslexia, or oral language problems (pp. 273-300). New York: Oxford University Press.

Nelson, N. W., Bahr, C. M., & Van Meter, A. M. (2004). *The writing lab approach to language instruction and intervention*. Baltimore, MD: Paul H Brookes Publishing Co. (out of print).