Literacy and Learning –
The case for integrated literacy across the curriculum

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“Teaching is brain surgery without breaking the skin.”

Daniel Walker, 1999 Alaska Teacher of the Year
Goals – To consider the following:

• What is literacy? Why is literacy important?

• How can we use integrated literacy to enhance student learning?

• What do educators need to know and be able to do?
What is literacy?

• The ability to use language to communicate and interpret the knowledge and ideas of others as well as our own.

• Literacy involves the integration of reading and writing along with speaking, listening, viewing and critical thinking in a variety of contexts and for a variety of purposes.
Writing has lagged behind...

• Literacy instruction in recent years has focused primarily on reading.
• There has been less professional development aimed at teaching writing and listening/speaking.
Where are the gaps?

• Just 36% of Florida students scored proficient or above in the most recent NAEP writing results.

• Of first-time college students in Florida:
  • 30% test into remedial writing, and
  • 37% test into remedial reading. (FDOE 2011)

*Writing is “the neglected ‘R’”, according to a report from the National Commission on Writing.*
Why do we write?

• To think, reflect and create
• To document or practice
• To communicate
Why is writing important?

• 80% of blue collar workers and 90% of white collar workers state that writing well is important or essential to their careers. (National Writing Project Survey, 2007)

• Academics and employers agree that writing is a critical skill for the 21st century and say that current graduates are not prepared.
What does real world literacy look like?

- Technical reports
- Memos, letters, emails
- Proposals
- White papers
- Position papers
- Narratives

- Lab reports
- Research, technical and progress reports
- Critical analyses
- Reviews
- Processes and procedures
- Instructions

Note that these are considerably different from the standard essay we teach in language arts classes.
How can we improve student performance?

Experts agree: We must focus on writing as well as reading. It is essential that students ....

- write often, for extended periods of time, about single topics,
- write frequently throughout the school day across the curriculum, and
- write for real audiences and purposes.
Why integrate writing and academic discourse into instruction?

• The process of composing text improves reading skills. (Fitzgerald & Shanahan, 2000)

• Writing about what we learn helps us to understand it better and move it into long-term memory.

• Developing a foundation of academic discourse allows students to collaborate, learn from others, and find the language to clearly articulate their ideas.

In short, by writing, students transform information into knowledge.
The Florida Standards point the way.

Florida has put integrated literacy front and center in all content areas.

- Call for integration of all four skills
- Include Standards for Literacy in History/Social Studies, Science and Technical Subjects
- Include literacy standards in the descriptions for all courses k-12.
Instructional Practices (from Biology 1)

GENERAL NOTES
• Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures . . . . Learners should understand measurement error; and have the skills to aggregate, interpret, and present the resulting data (National Research Council, 2006, p.77; NSTA, 2007).

Special Notes:
Instructional Practices
Teaching from a range of complex text is optimized when teachers in all subject areas implement the following strategies on a routine basis:
1. Ensuring wide reading from complex text that varies in length.
2. Making close reading and rereading of texts central to lessons.
3. Emphasizing text-specific complex questions, and cognitively complex tasks, reinforce focus on the text and cultivate independence.
4. Emphasizing students supporting answers based upon evidence from the text.
5. Providing extensive research and writing opportunities (claims and evidence).

1. Asking questions (for science) and defining problems (for engineering).
2. Developing and using models.
3. Planning and carrying out investigations.
4. Analyzing and interpreting data.
5. Using mathematics, information and computer technology, and computational thinking.
6. Constructing explanations (for science) and designing solutions (for engineering).
7. Engaging in argument from evidence.
8. Obtaining, evaluating, and communicating information.
41 Course Standards

LAFS.68.RST.1.3 Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.

LAFS.68.RST.2.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 68 texts and topics.

LAFS.68.RST.3.7 Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).

LAFS.68.WHST.1.1 Write arguments focused on discipline-specific content. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. Establish and maintain a formal style. Provide a concluding statement or section...
What do content-area teachers need to know and be able to do?

**Florida Standards – Key Instructional Shifts**

1. Regular practice with complex text and its academic language
   - close reading and interpretation
   - academic vocabulary

2. Reading, writing and speaking grounded in evidence from text, both literary and informational
   - writing to sources
   - reading, writing and reasoning across multiple texts
   - text-based questions and tasks
   - narrative, informative and argumentative writing

3. Building knowledge through content-rich nonfiction
   - history/social studies, science and the arts
   - independently build knowledge in the disciplines through reading and writing
# Kinds of literacy instruction

<table>
<thead>
<tr>
<th>Instruction</th>
<th>Venue</th>
<th>Topics/format/purpose</th>
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</thead>
<tbody>
<tr>
<td><strong>Basic literacy</strong></td>
<td>K-5 and ELA classrooms (mostly)</td>
<td>Mechanics, grammar, spelling, vocabulary, syntax</td>
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<tr>
<td>(Learning to write, read, use academic language)</td>
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<td>Modes of writing:</td>
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<td></td>
<td></td>
<td>• Narrative</td>
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<td></td>
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<td>• Informative/explanatory</td>
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<td>• Argumentative</td>
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<td>Reading comprehension and fluency</td>
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<td>Genres</td>
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<td></td>
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<td>Literary focus</td>
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<tr>
<td><strong>Content-area literacy</strong></td>
<td>Content-area and ELA classrooms</td>
<td>Subject matter focus</td>
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<tr>
<td>(Writing/reading to learn)</td>
<td></td>
<td>Complex texts, close reading</td>
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<td>Enhances content understanding through literacy strategies; <em>Ex:</em></td>
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<tr>
<td></td>
<td></td>
<td>• Journals</td>
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<td>• Summaries</td>
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<td>• Outlines</td>
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<td>• Brain-storming</td>
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<td>• Note taking</td>
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<td>Short and longer tasks, purposeful</td>
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<td><strong>Disciplinary literacy</strong></td>
<td>Content-area classrooms</td>
<td>Disciplinary focus, format &amp; language</td>
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<td>Authentic texts and purposes</td>
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Disciplinary Literacy

- Refers to the specialized ways of knowing and communicating in the different disciplines.
- Students need to be directly taught these specialized routines.

Subject area instruction must guide children’s reading and writing to produce the kind of literacy interactions and transactions that yield rich, full learning opportunities. (M.R. Ruddell, 1997)

Children’s general reading and writing abilities will not transfer automatically to subject area learning. (Fortescue, 1994)
## Differences in disciplinary discourse

<table>
<thead>
<tr>
<th>Social Studies/History</th>
<th>Science/Technical Subjects</th>
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<tbody>
<tr>
<td>• Recounting of events</td>
<td>• Technical, explicit, quantitative</td>
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<td>• Historical causes and effects</td>
<td>• Description, procedure, explanation, classification</td>
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<td>• Interpretation of human intention and reasoning</td>
<td>• Dense language</td>
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<tr>
<td>• Argument, narrative</td>
<td>• Nominalization (phrases used as nouns)</td>
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<td>• Active voice, the doer is important</td>
<td>• Authoritative, passive voice, the result is important</td>
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<td>• Text structure supports relationship among ideas</td>
<td>• Text structure supports clarity and locating specific information</td>
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<td>• Photos, maps, timelines</td>
<td>• Formulas, graphs, tables</td>
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(Shanahan, Shanahan & Misischia, 2011)
How can I support strong student writing?

1. Design tasks with the outcome in mind.
2. Provide models (mentor texts).
3. Scaffold instruction.
4. Assess for target concepts.
5. Consider next instructional steps.
6. Leverage your resources.

Dropbox for more detail and additional resources:
https://www.dropbox.com/sh/jcu6cfuzi4gg94s/AACwyN1LGrBe3HM5hr_pO2OGa?dl=0
Cross-curricular Opportunities

- Engage students and deepen learning.
- Work with grade-level colleagues on cross-curricular units to create contextualized, authentic performance tasks.

Examples:
- Literacy Design Collaborative (LDC)
- Problem-based Learning (PBL)
- Document-based Questioning (DBQ)


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How can teachers use literacy strategies to enhance learning?  

**Example: R.A.F.T.**

- **R** – Role of the writer
- **A** – Audience
- **F** – Format
- **T** – Topic

- Applicable in all content areas and across content areas
- Requires students to truly process information through transformation
- Creates an assignment with a sharp focus and clear purpose but allows for individual creativity

**Sample task:** Your are an epidemiologist (R) who has found alarming trends in flu incidence in a region. Write an advisory (F) for county health providers (A) to explain your findings and recommend emergency measures (T).

- Students are provided with data which they will need to graph and interpret.
- This may be a cross-curricular activity with health, math, ELA and/or science class.
Content-area teachers will need training in...

- Close reading
- Text-based questions
- Text complexity
- Selecting authentic texts
- Reading and writing from multiple texts
- Citing sources, quoting and paraphrasing
- Writing as a process
- Creating and using rubrics for writing and speaking
- Using writing and speaking for monitoring and assessment
- Responding to student products effectively
- Academic discourse in the disciplines
- Discipline-specific literacy types, features and demands
- Differentiation according to need
- Role of technology
- Backwards design of authentic tasks/units
- Cross-curricular unit design
- Foundational understandings of how we become literate, and how literacy strategies enhance learning
- Understanding the content-area literacy standards
- And....?
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Questions?

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- Please leave your completed Feedback at your seat.
- Indicate on the sign-in sheet if you would like to:
  - receive this PPT and the Dropbox link by email, and/or
  - be included on the Literacy Educators email list.