



# New York State Migrant Education Program

*Session 1 – The Learner: How students comprehend and learn information*



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## Introductions

Name, METS, anything else you'd like to share

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## Learning Community

- We all have a role in the direction of what we are learning
- The plan can be modified based on input from the community
- My role:
  - Introduce the research in comprehension and learning
  - Provide resources
  - Organize presentations
- Your role:
  - Determine approaches that apply the research findings
  - Share resources
  - Find ways to support our colleagues in the various METS

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## Structure

- Roles: Liz, Mary Anne, Jenny
- Before session
  - Short passage or reading
- During
  - PowerPoint
  - Glossary
  - Any materials needed during the session
- Resource library (additional readings; instructional tools; planning templates)
- Any suggestions?

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## Objectives - Overall

- The learner (1), text/material (2), teacher (3-7)
- LEARNER: Comprehension and learning
- TEXT: Layers of complexity
  - What makes texts or content complex?
  - What matters? Where is our focus?
- TEACHER: The importance of teaching to support transfer; vocabulary, materials, comprehension skills, and writing skills

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## Objectives – This Session (1)

- Memorizing and learning
- Comprehension defined: How learners process new information
  - Representation of the text-base vs. situation model
  - Prior knowledge...what knowledge supports learning?
  - Relevance
  - Transfer of learning
- Examples of big ideas in social studies
- \*\*\*See glossary for definitions

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## Focus Questions/Comments

- What are your experiences in addressing comprehension?
  - What about your colleagues?
- Where have you seen progress and challenges?
  - Use chat or wait for discussion

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## My Experience

- Master's thesis -text structure and introduced to Kintsch's work
- Dissertation in comprehension – background knowledge to support learning social studies content
- Massachusetts – assigned to support high-needs schools/districts
- Focus: addressing reading skills
  - LETRS trained and provided training
  - Simple view of reading (see slide)
    - For more info: <https://www.readingrockets.org/article/simple-view-reading>
- Our teachers learned to assess and teach early reading skills
- Our students started to read fluently
- Comprehension challenges became apparent
  - Tried strategy instruction
  - Integrated approaches to build language comprehension

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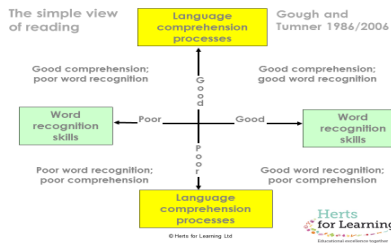
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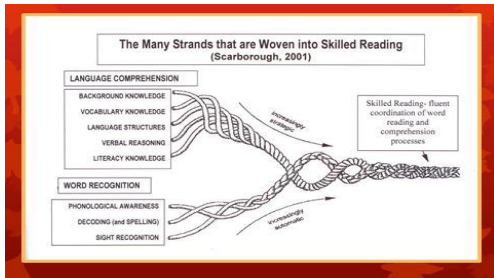
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### Your Thoughts

- What are your experiences in addressing comprehension?
  - What about your colleagues?
- Where have you seen progress and challenges?

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### Focus Questions/Comments

Consider learning new content:

- When did you try to memorize what you needed to retain?
  - Did you try anything to learn this content?
- Think of the ways that teachers activate/build knowledge.
  - Use chat or wait for discussion

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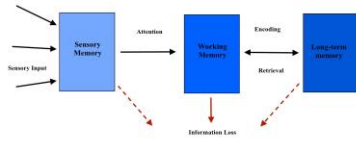
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### Information Processing Model




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### Learner: Memorization vs. Learning

- Memorization is often a default
  - Information committed only to short-term memory is fleeting; students attempt to remember details/facts.
- Information must integrate with information in long-term memory
- Background knowledge (prior knowledge) is needed

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### The Importance of Knowledge

“When students do not have the knowledge necessary to comprehend a particular text, such knowledge needs to be built; **one cannot activate what is not there, and one cannot strategize about things one does not know.**”

• - Dr. Julie Learmed, Dr. Darin Stockdill & Dr. Elizabeth Moje "Integrating Reading Strategies and Knowledge Building in Adolescent Literacy Instruction"

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## Construction-Integration Model

- “When we read, we use our knowledge along with our perceptions of **what we think the text says to literally build, or construct, mental representations of what the text [says]**. Once those representations are constructed, we can merge, or **integrate, the information in those models with the knowledge stored in our minds. When we achieve that integration, we call it learning**; we literally know more than we did before the reading” (Duke et al., 2011, p. 53).

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## Comprehension

- Surface (exact wording)
  - Text-Based Representation (what the text says)
  - Situation Model (what the text means)
    - Students’ prior knowledge
- (Kintsch, 1998)
- **Learning is the result of constructing and integrating information with prior knowledge**

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## Your Thoughts

Consider learning new content:

- When did you try to memorize what you needed to retain?
  - Did you try anything to learn this content?
    - Activating or building knowledge?

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## Focus Questions

As you are reviewing the BTP passage:

- What does it say?
- What does it mean?
- What prior knowledge do students require to access meaning?

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## Passage

Using the 4<sup>th</sup>-grade passage, "A Tea Party in Boston," identify knowledge challenges an elementary-grade student may encounter due the complexity of:

- Knowledge
- Vocabulary
- Setting

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## Complex Information

Knowledge	Vocabulary	Setting	Structure	Other

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## Study with Fourth Graders

- Compromise
- Trade
- Exploration
- Migration
- Exploration
- Representation
- Invention
- Taxation

(Lord, under revision)

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## Background and Prior Knowledge

- Students' prior knowledge supports comprehension and learning.
  - Comprehension fails when student do not yet have adequate background knowledge or do not access relevant prior knowledge (**Bransford, 1984**)
  - Access **relevant** knowledge: relevance instructions or attention redirection (**McCrudden & Schraw, 2007**)

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## Why Prior Knowledge Matters

- Increases processing speed
- Focuses attention
- Enhances inferencing
- Facilitate comprehension
- Promotes transfer

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## Focus Questions

- What information from the BTP can be applied across events (transfer)?
- How is the passage information relevant to young students? What can we do to support learning?

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## Transfer

- Ability to “treat” a new concept, problem, or phenomenon as similar to one(s) they have experienced before.
- Transfer can also be “*Initial learning followed by reusing or applying what was learned.*”
- (Chi & VanLehn, 2012)

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## Relevance

- Information can be applied to personal interests, contexts, or cultural experiences of students (personal relevance)
- Information can be connected to real-world issues, problems, and contexts (life relevance)
- Teachers can set learning goals and guide attention to relevant information

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## Using the Boston Tea Party

- Small groups:
  - Select concepts/big ideas that **transfer**.
  - Which of these ideas can be connected to students' **prior knowledge**?
  - How can we make this information **relevant** for 4<sup>th</sup> grade students?

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## Your Thoughts?

- What information from the BTP can be applied across events (transfer)?
- How is the passage information relevant to young students? What can we do to support learning?

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## Events with a Common Big Idea

- Boston Tea/Shay's Rebellion
- Montgomery Bus Boycott
- Cesar Chavez
- Women's Suffrage
- Occupy Wall Street
- Saving a neighborhood park
- Underground Railroad
- Worker's rights
- Child Labor
- Civil Rights

(Lord, Noel, & Slevin, 2016)

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## Conclusion: Thoughts/Ideas/Questions?

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## Next Session: Text

- Layers of "content" complexity (based on WestEd)
  - What makes text or content complex?
  - What matters? Where is the student's attention?
- Determine areas that support learning

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