Bridging the Reading Theory to Practice Divide

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Our vision of content area literacy

(Calfee, Miller, Thomas & White-Smith, 2005)

There is a growing awareness that the current focus on beginning reading is insufficient to sustain long-term student achievement, in school and beyond. Teachers and students need a wider and more powerful understanding of language and literacy as fundamental tools for thinking and learning.

Language and literacy are embedded in the construction of content area knowledge. Without content, literacy – the two-way communication of an idea or construct – cannot be achieved. Language and literacy provide tools that enable us to make sense of and communicate our ideas, concepts, and bodies of information. These tools allow us to transform inert content facts into dynamic understandings and concepts.

Acquiring this level of literacy requires the engagement of teachers and students in parallel developmental activities. As co-constructors of knowledge, together they become confident, independent, reflective, informed, engaged, and collaborative learners. Sustained learning can only be achieved with deliberate attention to the motivation level of both teacher *and* student.

Backwards Planning

In planning backwards, a school pauses from the daily routine to create a vision of its graduates performing as the school hoped they would by graduation. Then, the school takes stock of its efforts to fulfill this vision and reorients its systems as necessary. From a vision of all its graduates using their minds well, the school plans backwards to these graduates' first days in school assessing the efficacy of structures, curricula, communications, the tempo and tone of school days, methods of teaching and learning, and more – all by the light of the vision.

(From "Steps in Planning Backwards: Early Lessons From The Schools" by Joseph P. McDonald, Coalition of Essential Schools, February, 1992)

Balancing the Scales

Traditional View:

- CONTENT FOR LITERACY
- Literacy as basic skill
- Emphasis on assessment
- "How to write a lesson plan"
- Static plan for instruction and assessment (Pacing Chart)

VS.

Our View:

- LITERACY FOR CONTENT
- Literacy as essential partner
- Emphasis on learning
- How to develop teacher capacity
- Dynamic Planning & Reiterative Instruction

Re-examining content area literacy practice

Current view of subjects and approach: linear model

- Literacy → Literacy Achievement
- Social Studies → Social Studies Achievement
- Science → Science Achievement
- Mathematics → Math Achievement

The content areas are seen as separate and distinct paths to different outcomes.

Proposed synergistic model

Singular focus that yields synergistic outcomes

Fundamental Literacy Development

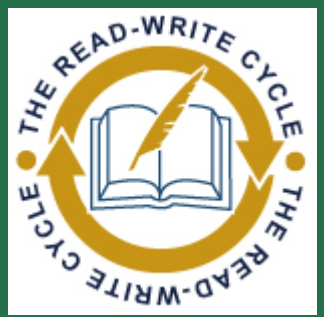
Plus

Disciplinary Content

- Reading
- Writing
- Social Studies
- Science
- Mathematics

Emphasizing literacy as a tool for thought and achievement in all domains

Theoretical Basis for Bridging the Divide



Schema Theory

Reading-Writing Connections

Looking through a new lens:

From comprehension to composition--using writing to measure both reading comprehension and writing ability simultaneously/conjointly.

Basis for this approach lies within schema theory and reading-writing connections.

The role of reading comprehension must be addressed in the design and analysis of any writing assessment.

Why schema theory?

- Schemata serve as the templates for the comprehender to organize new information, written or oral.
- Schema theory applies not only to the assimilation of new ideas or meanings, but also to structures found in text, graphics, and representations.
- The assessment process itself also has its own schema, as does instruction.

The Reading-Writing Connection: What We Know

- Reading and writing share cognitive processes.
- Students who write prior to reading read more critically.
- Writing coupled with reading prompts more thoughtful consideration of ideas than writing alone, reading alone, or either writing or reading in combination with questions.
- Writing activities contribute to better learning than reading without some form of writing, especially if the material is less familiar to the student.

How can reading and writing activities be systematically linked and used to simultaneously measure reading comprehension & writing achievement?

The Read-Write Cycle

Keys to Success

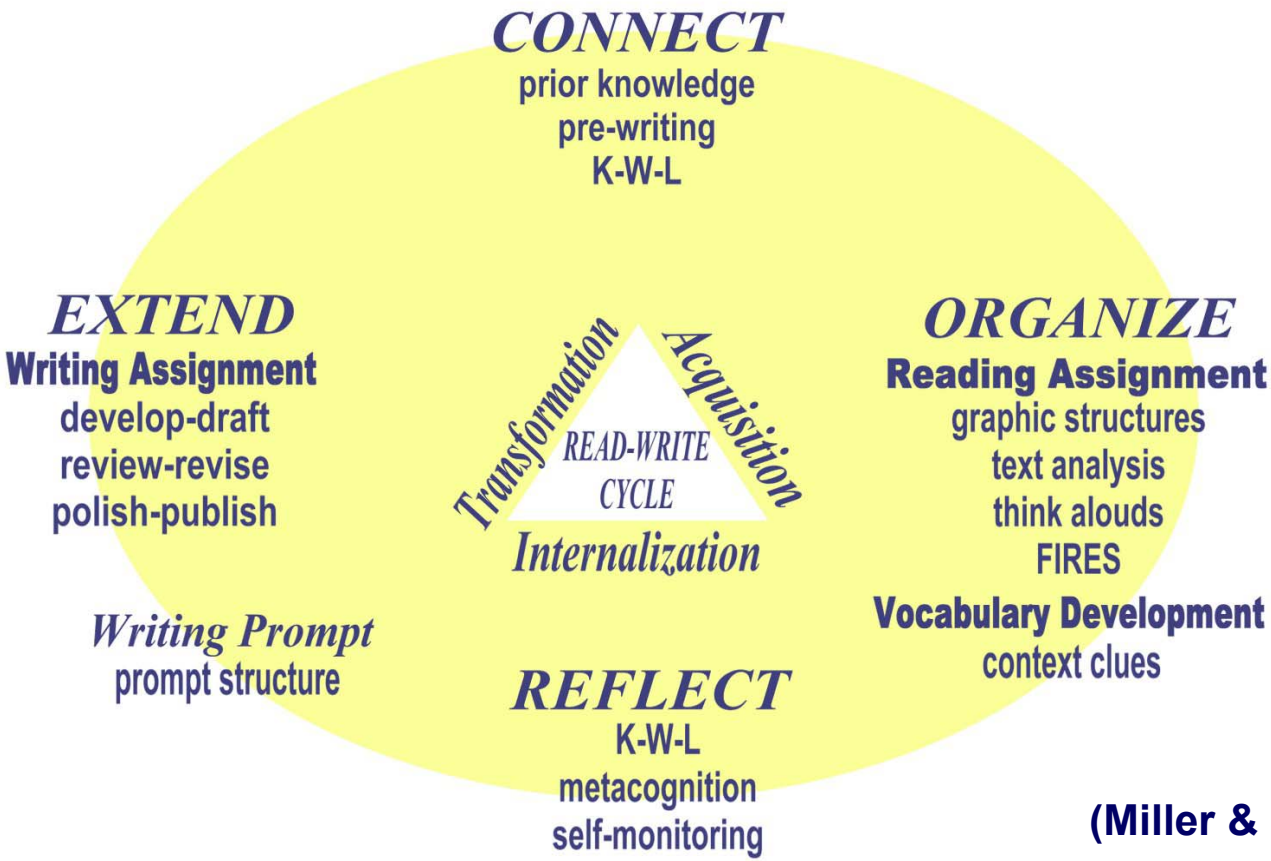
Identify educational strategies that are

Efficient - time and cost

Effective - high-level outcomes for all students

Adaptable - for age and ability

The Read-Write Cycle



(Miller & Calfee, 2004)

The Read-Write Cycle incorporates the following:

- Connection to prior knowledge
- Organization of ideas both before and after reading
- Graphic organizers matched to reading/writing task
- Vocabulary building strategies to accompany reading
- Specific prompt structure
- Making writing a structured process
- Metacognitive reflection throughout model

The Read-Write Cycle Project

Conducted by UC Riverside and Chapman University in conjunction with the Orange Unified School District

Funded by U.S Department of Education

RWC Project Goals

- To simultaneously improve students' reading comprehension, expository writing skills, and content area knowledge.
- To enhance students' ability to search out and select information from text sources,
- To analyze the information using rhetorical structures, and,
- To transform and synthesize the information into high quality expository writing.

Assumptions

- The integration of reading and writing instruction is key to improving students' reading comprehension and writing skills.
- All students, but particularly students who struggle with writing, benefit from explicit instructions in cognitive and socio-cognitive strategies to reading, writing, and problem solving.
- Writing coherently and insightfully requires competence in the subject matter to be written about.

RWC Project Instructional Components: Main Ideas

- Teacher-developed units of instruction that integrate content with literacy.
- Teachers use the Read-Write Cycle to plan cyclical – not linear – instruction.
- Extensive, ongoing professional development.
- Conforms to CA State Standards.
- Uses a variety of instructional materials beyond the adopted textbook.

The RWC schools:

- 10 schools within one urban-suburban district
- 4 of the schools received Title 1 funds in 2004-2005
  - (3 school-wide; 1 targeted assistance program)
- 7 3rd grade classrooms; 8 4th grade classrooms; 6 5th grade classrooms; 5 6th grade classrooms; 1 grades 4-5-6 combo classroom
- 3 schools did not meet federal AYP in 2005; 2 schools were enrolled in federal Program Improvement (Year 2 and Year 3)
- API's range from 628 to 878 [CA mean = 709]
- English Language Arts CST scores range from 309 to 379 [CA mean = 336]

The RWC students and their teachers:

STUDENTS:

- 42% Hispanic, 40% Anglo, 10% Asian, 2% African-American district-wide
- 34% low SES; 22% LEP; an additional 20% Fluent EP (former LEP students not yet exited from ELD program)
- Third, fourth, fifth & sixth graders

TEACHERS:

- Range from 2 to 25+ years of experience
- 50% have Master's degrees
- 25 female; 2 male
- Exhibit varying levels of receptiveness to integrated content area reading instruction


Diversity
Regions
Native Americans
Gold Rush
Missions/Explorers

RWC Project **Grade: 4** **Thematic Unit Curriculum Map**

Theme, Enduring Understandings & Essential Questions for this Unit	How Students will Demonstrate Their Understanding	Standards-based Essential Skills & Concepts to be Targeted Throughout the Unit	Strategies/Best Practices Used to Explicitly Teach the Skills & Concepts	Resources for this Unit
Theme: Diversity Gold Rush **Enduring Understanding:** Diverse cultures transformed California during and after the Gold Rush. **Essential Questions:** * What motivated people to come to California? * What were the advantages and or disadvantages of diverse populations in California? * What was the environmental impact on land and people during the California Gold Rush?	**Summative Assessment (at the end of the unit):** * Unit Test * Portfolio/Conference * Small group project * Journals **Formative Assessments (throughout the unit)** * student projects * portfolio * group evaluations * teacher observation	**Content Areas:** **Social Studies:** 4.1, 4.3 **Science:** Life 3c Earth 4b **Math:** 1.0 Statistics, Data Analysis 1.1 Probability **Reading:** 1.0 1.1-1.6 2.0 2.1-2.7 3.0 3.1-3.5 **Writing:** 1.0 1.1 1.2 1.3 1.6 1.7, 1.8 2.1-2.4 **Speaking & Listening:** 2.0 2.1-2.4 1.0 1.1-1.6	• KWL charts • Realia • Hands on Activities • Graphic org • Small group • Direct teaching • GLAD • SDAIE • Reciprocal teaching • CGI Math • Experiments	**Anchor Texts:** Social Studies Math LA Science **Ancillary texts/readings:** By the Great Horn Spoon The Calif. Gold Rush Patty Reed's Doll **Media:** *video *computer games **Special Equipment:** *science kits **Other:** *guest speakers *field trip

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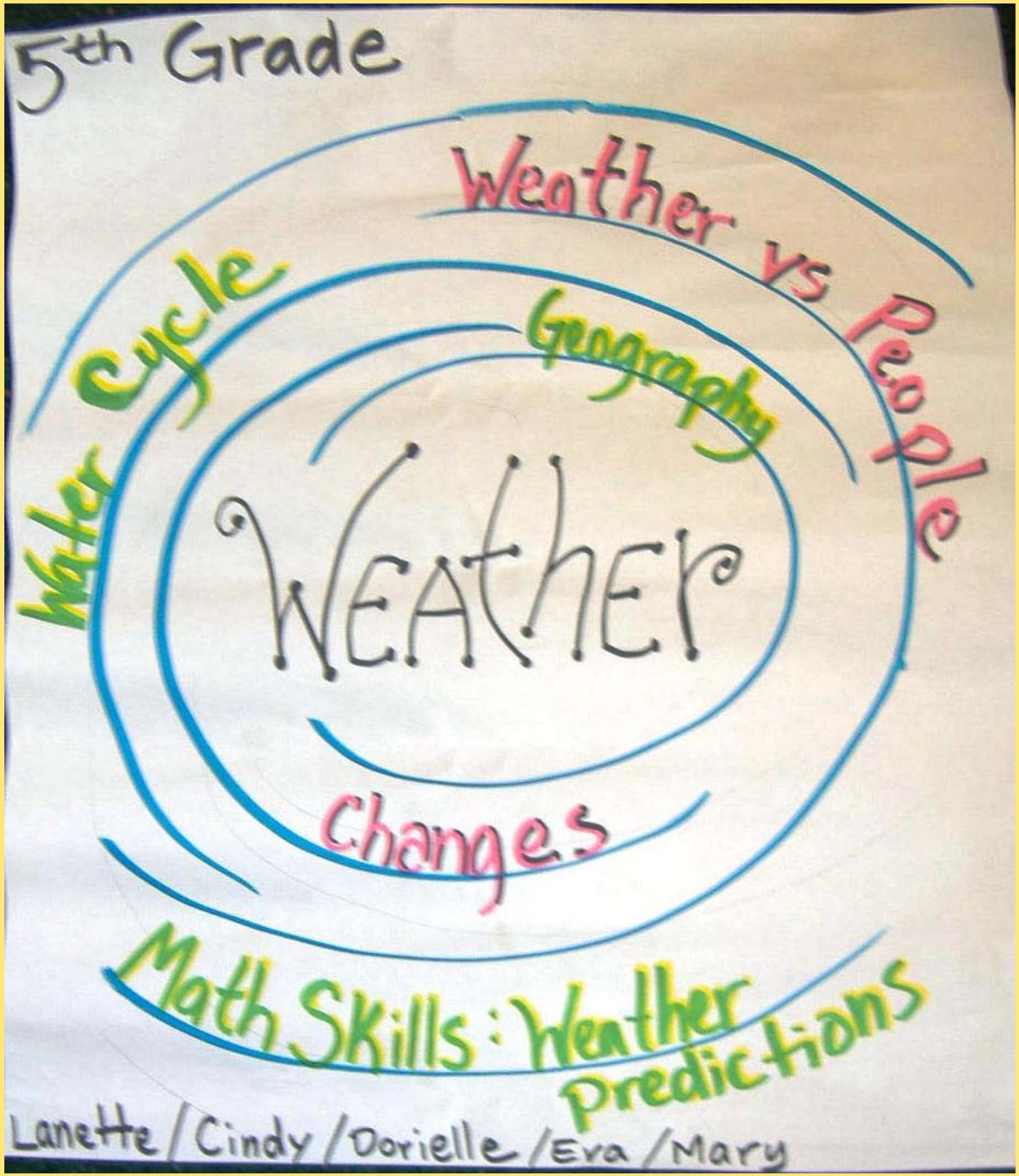
Theme: Predictable patterns on earth affect human development/interaction * geographical and solar system **Enduring Understanding:** changes over time on Earth and specifically in Orange County. **Essential Questions:** * How do people adapt to the land and seasonal changes? * How do they change over time? * How does the moon affect the earth? * How are seasons formed? * How weather patterns have affected life?	**Summative Assessment (at the end of the unit):** * Harcourt chapter test * compare and contrast Anaheim paragraph writing **Formative Assessments (throughout the unit)** * performance assessments * science notebook * discussion and participation * worksheet	**Content Areas:** **Social Studies:** * Local History * Anaheim its history and growth **Science:** Earth How the moon and Earth interact, seasons, phrases of the moon **Math:** Place value Graphing Comparing and ordering **Reading:** *Expository texts *Distinguish main idea and details from text *cause and effect *making predictions and summarizing **Writing:** *formal letter writing *outlines to organize information *descriptive writing *expository research **Speaking & Listening:** *oral presentation *retell	• Letters to city hall • Examples of timelines • Record moon phrases on calendar/use local paper • timeline • Anaheim timeline • Use take home books to create contents, glossary and highlight main portions • Writing paragraphs • Share timelines	**Anchor Texts**: Harcourt Science **Ancillary texts/readings:** *take home books for science *home-school connections *teacher collected material **Media:** *video *internet *watch council meeting **Special Equipment:** *overhead project **Other:** *trip to Kellogg House *realia

RWC Project **Grade: 4**

Thematic Unit Curriculum Map (Unit 2 – Quarter 2: Oct ➔Dec)

Theme, Enduring Understandings & Essential Questions for this Unit	How Students will Demonstrate Their Understanding	Standards-based Essential Skills & Concepts to be Targeted Throughout the Unit	Strategies/Best Practices Used to Explicitly Teach the Skills & Concepts	Resources for this Unit
Theme: Change over Time **Enduring Understanding:** People, animals, society, and environment change over time **Essential Questions:** * How did explorers and the mission system change the Native American culture? * How do human factors and natural causes impact the ecosystems over time?	**Summative Assessment (at the end of the unit):** * Mission written/oral project * Teacher created and publisher tests **Formative Assessments (throughout the unit)** * vocabulary and comprehension quizzes * math "Quick Checks" * CGI – problem solving write-ups	**Content Areas:** **Social Studies:** Explorers & Missions (4.2: 2, 3, 4, 5, 6, 7, and 8) **Science:** Life Science 2.0 all and 3.0 all **Math:** Multiplication/division 3.2, 3.3, 3.4 Measurement 1.0 all **Reading:** Island of the Blue Dolphins **Writing:** Response to Literature Writing Application 2.2 Written Conventions all **Speaking & Listening:** Report of information 2.3 (Mission Report) and Oral Presentation of Mission Report	• reciprocal teaching • guided reading • SQR3 with text • Graphic organizers • "CGI math" • direct teaching • ExCEL math differentiated instruction • Science – AIMS activities • Interact Simulations	**Anchor Texts:** • S.S. = Harcourt text (new adoption) • Math = Houghton Mifflin • Reading = Houghton Mifflin • Science = McGraw Hill **Ancillary texts/readings:** Island of the Blue Dolphins novel **Media:** Video streaming in science and social studies content **Special Equipment:** Science Kit – if district purchases "Ecosystems" **Other:** "Lost Tribe of Tocowans" (simulation of lost tribe using multiplication)


5th Grade
Weather vs People
Water Cycle
Geography
WEATHER
Changes
Math Skills: Weather Predictions
Lanette / Cindy / Dorielle / Eva / Mary

UNIT: Earth's Water and Weather

Enduring Understandings

1. Water on Earth moves between the oceans and land through the processes of evaporation, condensation, and precipitation.
2. Energy from the sun heats the Earth unevenly, causing air movements that result in changing weather patterns.
3. Different weather conditions/events have different causes.
4. Weather and climate have strong affects on humans and the way they live.

Essential Questions

1. How does water move between the oceans and land?
2. What is the difference between weather and climate?
3. What causes various severe weather events?
4. How has weather affected the lives of people throughout time?

Summative Assessments

1. Essay (Water)

Students will write an essay about Earth's water that:

- Includes an introductory paragraph
- Discusses the amounts of fresh water and salt water on Earth
- Describes the water cycle, explaining evaporation, condensation and precipitation
- Explains the importance of water conservation and recycling and give 5 examples of each
- Includes a conclusion paragraph

2. Essay Test (Weather)

a. Describe the differences between climate and weather. (15 pts.)
b. Explain what air pressure is. Tell how it is different at different altitudes. (15 pts.)
c. Explain two reasons the Earth is heated unevenly by the sun. Describe how this uneven heating of the Earth causes convection currents. (30 pts.)
d. Describe how the water cycle affects weather patterns. (15 pts.)
e. Explain the causes of thunder and lightning. (15 pts.)
f. Describe hurricanes and how they form. (10 pts.)

Formative Assessments

1. Graphic organizer using Inspiration software Re: water cycle
2. Draw a diagram of the water cycle
3. Venn Diagram (weather & climate)
4. Vocabulary Chain Game (weather)
5. Graphic organizers (causes of thunder/lightning and causes of hurricanes)

STANDARDS

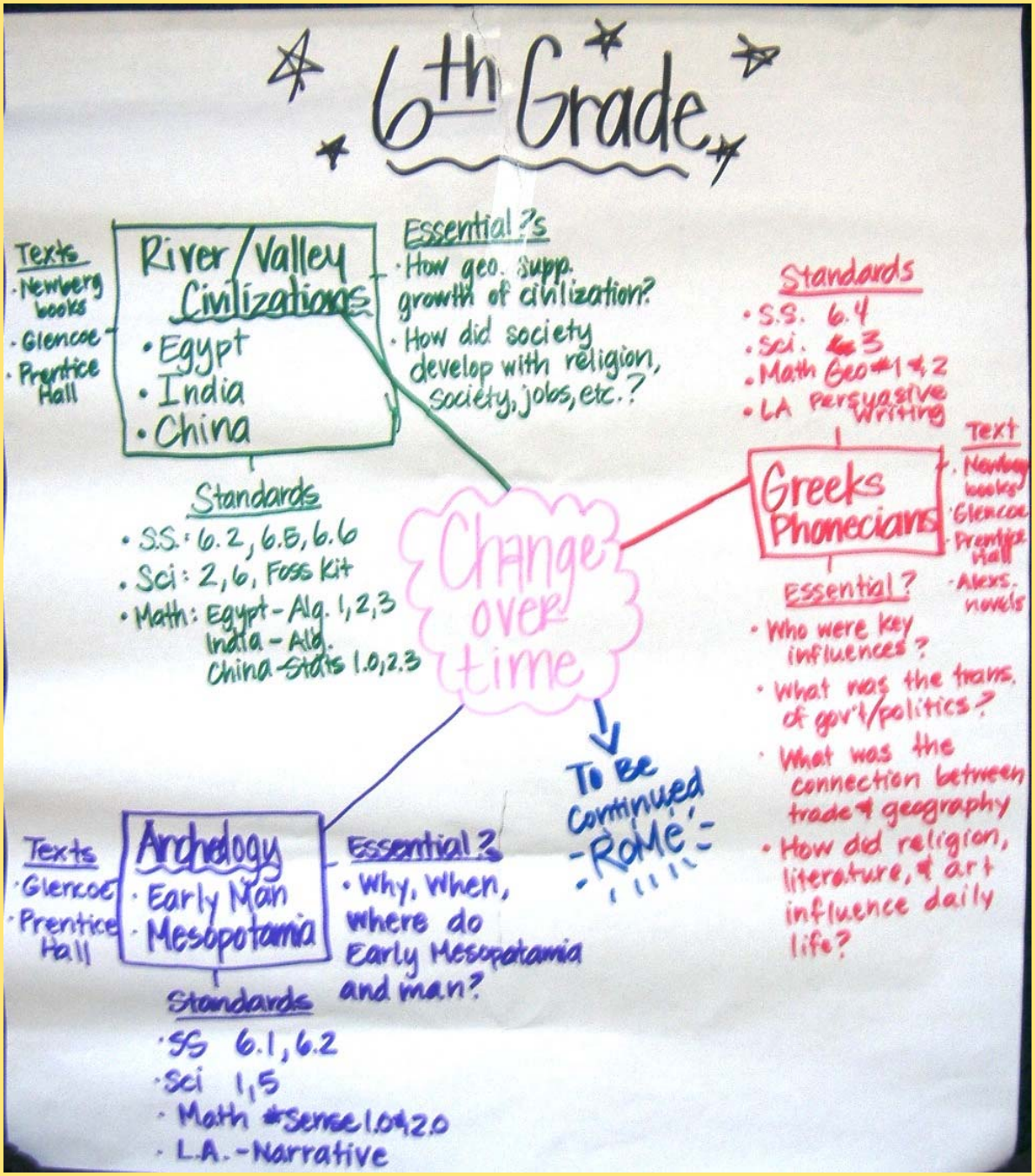
Science: 3.a–3.e, 4.a-4.e (earth science) 6.b, 6.c. 6.d. e, 6.f, 6.g, 6.h (Investigation/Experimentation)
Social Studies: 5.1.1
Reading: 1.1, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.4, 3.5,
Writing: 1.2, 1.4 **Language Conventions:** 1.1 **Speaking/Listening:** 1.1, 2.3
Art: 2.4, 2.6

Instructional Strategies – Best Practices

1. Graphic organizers: Inspiration, Venn diagram
2. Direct instruction (lecture/note-taking)
3. Reading from multiple sources
4. Explicit vocabulary instruction embedded in lessons
5. Step Up To Writing
6. Small Group Cooperative learning (Heterogeneous groups)
7. Literature Circles/Book Clubs

RESOURCES

1. Anchor Text: Science Textbook (Harcourt)
2. Ancillary: Introduction to Weather, National Geographic (buy 8 copies)
3. Ancillary: (expository) Hurricanes: Earth's Mightiest Storms, Scholastic
4. Ancillary: (expository) Weather, Kids Discover
5. Ancillary: (expository) Climate, Kids Discover
6. Ancillary: (expository) Rain and Snow, Kids Discover
7. Ancillary: (expository) Weather and Climate, National Geographic
8. Ancillary: (expository) Extreme Weather, National Geographic
9. Ancillary: (expository) Wonders of Water, National Geographic
10. Ancillary: (expository) Eye of the Storm, Houghton Mifflin Anthology
11. Ancillary: (fiction) Blown Away, Gare Thompson, National Geographic
12. Ancillary: (fiction) The Tri-State Tornado, Rebecca Johnson, National Geographic
13. Ancillary: (fiction) The Johnstown Flood, Rebecca Johnson, National Geographic


6th Grade
River/Valley Civilizations
• Egypt
• India
• China
Texts
· Newberg books
· Glencoe
· Prentice Hall
Essential ?s
· How geo. supp. growth of civilization?
· How did society develop with religion, society, jobs, etc.?
Standards
• S.S.: 6.2, 6.5, 6.6
• Sci: 2, 6, Foss Kit
• Math: Egypt - Alg. 1, 2, 3
India - Alg.
China - Stats 1.0, 2.3
Change over time
To be continued - Rome -
Greeks Phoneciens
Standards
• S.S. 6.4
• Sci. #3
• Math Geo #1 & 2
• LA Persuasive Writing
Text
· Newberg books
· Glencoe
· Prentice Hall
· Alexs. novels
Essential ?
• Who were key influences?
• What was the trans. of gov't/politics?
• What was the connection between trade & geography
• How did religion, literature, & art influence daily life?
Archeology
· Early Man
· Mesopotamia
Texts
· Glencoe
· Prentice Hall
Essential ?
• Why, When, where do Early Mesopotamia and man?
Standards
· SS 6.1, 6.2
· Sci 1, 5
· Math #Sense 1.0 & 2.0
· L.A. - Narrative

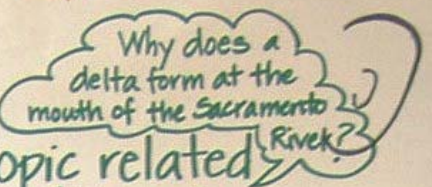
RWC Project **Grade: 6** **Thematic Unit Curriculum Map (Unit 1 & 2)**

Theme, Enduring Understandings & Essential Questions for this Unit	How Students will Demonstrate Their Understanding	Standards-based Essential Skills & Concepts to be Targeted Throughout the Unit	Strategies/Best Practices Used to Explicitly Teach the Skills & Concepts	Resources for this Unit
Theme: Changes **Enduring Understanding:** People and land change over time. People influence changes to the land. Land impacts the development of humans. **Essential Questions:** • How does man change over time physically and culturally? • How does earth change over time?	**Summative Assessment (at the end of the unit):** • Early Man written project • Teacher created and publisher tests **Formative Assessments (throughout the unit)** • writing samples • math "Quick Checks" • CGI – problem solving • teacher created and publisher quizzes	**Content Areas:** **Social Studies:** 1.0: 1.1, 1.2, 1.3 **Science:** • Plate Tectonics & Earth's Structure • Topography 2.1, 2.2, 2.3 **Math:** District pacing guide **Reading:** 6R1.2, 6R1.4, 6R2.1, 6R2.2, 6R2.4, 6R3.2, 6R3.3, 6W1.2, 6W1.3, 6LC1.2, 6LC1.4, 6LC1.5 **Writing:** 1.1, 1.2, 1.3, 1.6 **Speaking & Listening:** 1.1, 1.5, 1.6, 1.7	• reciprocal teaching • guided reading • foldables • graphic organizers • CGI math • direct teaching • ExCEL math differentiated instruction • Science – AIMS landforms kit • Interact Simulations • GLAD strategies	**Anchor Texts:** • S.S. - Glencoe Ancient Civilizations • Math – Harcourt • Reading – Prentice Hall Literature • Science – Prentice Hall Science Explorer • **Ancillary texts/readings:** • The Boy of the Painted Cave • Maroo of the Winter Caves • Early Humans (Interdisciplinary Unit) **Media:** *Video streaming in science and social studies content * Technology Projects **Special Equipment:** **Other:** *Cave Man Day

Read-Write Cycle

See it!

- Students using reciprocal teaching cards (groups of 4)
- Step up to Writing graphic organizers used to expand on topics:
  - topic
  - detail, fact...
  - explain, example...
- small groups working on reading skills with multiple copies of a related topic book (guided reading)
- Book Club groups sharing a set of novels.



- topic related discussions
- charts and motions to the rock cycle
- readers' theaters of student generated poetry on "their CA region" → "The ocean tugs at the shoreline's jagged cliffs."

- excitedly questioning/discussing
- nervous to give their own opinions/input
- Smiles
- stimulated } laughing and having a good time

Canyon Rim
GR 3, 4, 6

The Read-Write Assessment: Essential Components

- Must be based on a selected text (reading sample)
- The text must be constructed to capitalize on existing schema
- The text and prompt must reflect a clear conceptual framework
- The prompt must be explicit, reference students' schema of writing experience, and must provide for an expression of reading comprehension.

Read-Write Cycle: Prompt Structure

- Starts with a focus statement
- Provides labeled space for pre-writing organization
- Tells who the audience is
- Clearly tells type of writing to be composed
- Uses explicit language to explain the purpose of the writing (write to explain, to convince, etc.)
- Reminds students where supporting details should come from (text, text and experience)

Participant teacher interviews

Questions

For more information

Visit the Read-Write Cycle Project Website at

www.readwritecycle.org

Complete contact information for all presenters appears on the website. Additionally, our project office is located at

Chapman University

Read-Write Cycle Project

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