



K-2 Biliteracy Strategies: Science and Language Arts

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Teaching for Biliteracy

**Teaching for biliteracy is NOT
the same as teaching for
monoliteracy!**



Why is it blue?

Sample 50/50 Content and Language Allocation Plan

Kindergarten Spanish (my teaching partner)	Kindergarten English (me)
Mathematics	Science
Social Studies	English Language Arts
Spanish Language Arts	

1 st Grade Spanish (my teaching partner)	1 st Grade English (me)
Science	Mathematics
Spanish Language Arts	Social Studies
	English Language Arts



Student's Perspective

Time	Subject	Language
9:00-10:00	Social Studies and Language Arts • Inquiry/Project Based • Oracy Development • Whole Group Instruction • Writing • Independent Practice • Word Work/Dictado	Spanish
10:00-11:00	Math • Oracy Development • Math Skills	Spanish
11:00-11:25	Math • Small Group Instruction	Spanish
11:25-12:00	Science and Language Arts • Oracy Development • Word Study	English
12:00-1:00	Lunch/Recess	Student Choice
12:45-1:00	Bilingual Journals	Student Choice
1:00-1:30	Specials	English
1:30-3:00	Science and Language Arts • Inquiry and Science Experiments • Independent Practice • Writing • Guided Practice	English



Biliteracy Strategies

Strategy	Pg in T4B	Key Take-Aways
Say Something	p.95	
Concept Attainment	p. 53-56	
TPR	p. 81	
LEA	p. 57-59	



Oracy Before Literacy

Biliteracy strategies need to be applied to BOTH languages of instruction for effective biliteracy development.

We are NOT teaching 2 monolingual classrooms!



The Purpose of Oracy is ...



..to prepare **ALL** students for literacy success with grade level texts and academic content.



The Purpose of
Background Knowledge
and Oracy Building Activities is to...



Develop language,
content knowledge,
and prepare students
for literacy.



What are Scaffolds?



Strategies and supports that get students to grade level performance and independence.



Strategies for Student Engagement

What Students Will be Doing



Numbered Head Together



Supports for Language Acquisition

How Students Will Be Doing It

 Sensory Supports	 Graphic Supports	 Interactive Supports
• Real-life objects • Manipulatives • Pictures • Photographs • Illustrations, diagrams and drawings • Physical activities • Videos and films • Broadcasts • Models and figures • Experiments • Experiences	• Charts • Graphic organizers • Tables • Graphs • Timelines • Number lines	• In pairs or partners • In triads or small groups • In a whole group • Using cooperative group structures • With mentors

Unified by a Theme or Topic – In Context
Created with/by students and used by Students

Adapted from WIDA, 2007

Building oracy and background knowledge means...

- ...beginning instruction in a way that allows ALL students to participate actively and meaningfully
- ...explicitly planning for and implementing strategies that build both receptive (listening) and productive (speaking) oral language use
- ...increasing student-student interactions in the language of instruction
- ...decreasing teacher talk



Concept Attainment

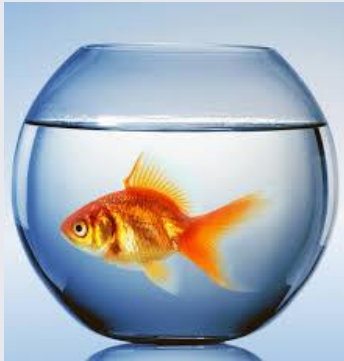
Observe your item.

What do you see? I see ____.

What do you feel? I feel ____.

What do you smell? I smell ____.

What do you hear? I hear ____.



Pretend the pictures of animals are
the real animals!

Concept Attainment

Sort these items into two categories. Why did you sort them the way you did?

Pretend the pictures of animals are the real animals!

Sentence Prompts

This _____ (name of item) goes in this pile
because _____.

I put the _____ with the _____
because they both _____.



Label the columns

Living things	Nonliving things



Processing time...



Specifically, what steps did I take to demonstrate Concept Attainment as a biliteracy strategy?



Concept Attainment

1. Norms for exploration. FISHBOWL of sentence prompts to demonstrate.
2. Debate, Discuss, Inquire (“Sort the item and state why.”)
3. Sentence Prompts for social language and/or language structure.
4. Using student language as foundation, celebrate known vocabulary and define using academic language. List.
5. Introduce unit title/set precedence for future learning using academic vocabulary.



Strategic Partnerships



How will students be partnered?



Time for TPR!

Living and Nonliving



Strategy: Total Physical Response



**...but it
depends on
your
students!**

TPR Progression (approx.)

- Day 1, 2 - everyone repeats and copies motions but no talking
- Day 3, 4 & 5 - echo (for a long time)
- Day 6 - start gradual release (student teachers, pointers, and page turners)
- Day 7, 8, & 9 - turn to thinking partners and one thinking partner will say words while other does the actions
- Day 10 - “quizzing” partner, one with back to the flipchart
- Beyond – Take to reading, writing



Oracy Development

1. Concept Attainment
2. Fishbowl
3. Sentence Prompts
3. TPR and gradual release of responsibility



Processing time...



How long would oracy building last in a classroom?
What are the benefits of taking time to build oracy?
What are the challenges?



How did I know what to do to build oracy??

Building Oracy and Background Knowledge Concept Attainment: Collection of items (plants, block of wood, toy, stuffed animal, pictures of real animals, etc.); students sort items based on an attribute. Have students explain their thinking. If no one comes up with it, teacher sorts items based on whether they are living or nonliving and have class determine attribute. Discuss differences between living and nonliving through Total Physical Response.	
Reading Comprehension Guided Reading on living things (animals, plants) - Read <u>around</u> on living/nonliving, both fiction and nonfiction. - Shared Reading chants, poems on living and nonliving things	Content Area Instruction Students will be able to identify what all living things need to survive and describe why living things live in certain places. - Inquiry – sorting items based <u>off of</u> whether they are living or nonliving - Investigations – <u>comparing and contrasting</u> mealworms and rocks - Experiences – observing the changing landscape due to the seasons (specifically the trees on our playground); observing living things such as pets at home, classroom visitors (ask families to bring in pets and talk about their needs)
Writing - Language Experience Approach on living things as Interactive Writing – student compose - Nonfiction writing, student-composed, based on facts about living things. Students will compile a book on the various animals we learn about. - Flip book, pages written by 2 different <u>student</u>. 1st page: “Is a _____ living?” Flip, other student write answer: “Yes/no, a _____ is/is not living. It needs/does not need _____ to survive.” Turn into class book. - Make pet rocks. Brainstorm why a nonliving pet would be great (no mess to clean up after, do not need to feed it, it will not grow, etc.). Write a letter to parents persuading them to allow you to keep the rock. E.g. Dear Mom and Dad, <u>My</u> rock would make a good pet... (continue by giving reasons why). <i>Teach letter format, persuasive/opinion writing.</i>	

Formative Assessment



How did I know what to do to build oracy??

Content

K-LS1-1 Use observations to describe patterns of what plants and animals (including humans) **need** to **survive**.

K-ESS3-1 Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.

Disciplinary Core Ideas:

LS1.C: Organization for Matter and Energy Flow in Organisms.

- All animals **need food** in order to **live and grow**. They obtain their food from plants or from other animals. Plants need water and light to live and grow.

ESS2.E: Biogeology

- Plants and animals can **change** their **environment**.

ESS3.A: Natural Resources

- Living things need **water, air, and resources** from the land, and they live in places that have the things they need. Humans use natural resources for everything they do.



Brain Research

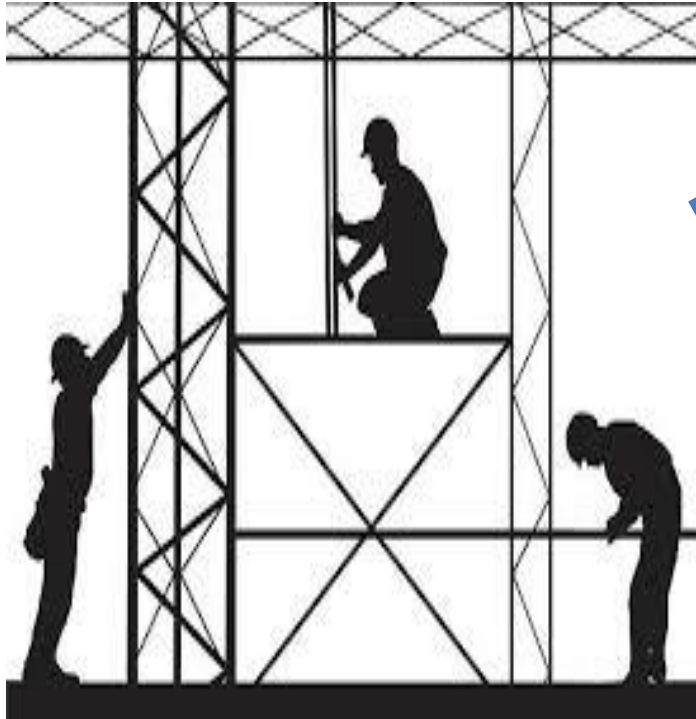
(How the Brain best Learns)

- Experience sculpts the brain.
- “If it doesn’t make sense, the brain won’t store it.”
- Learning must take place in a safe environment.
- Learning is two-fold: rote (repetitive) and declarative (critical thinking).
- Movement is critical for the brain. Get up and move!
- Verbalization is required for processing.



Theme/Unit Name: - Content Area Standards - Writing Standards - Reading Standards:			- Content Area Big Idea(s) - Literacy Big Idea(s) - Content Targets	-Language Proficiency/Development Standards - Language Targets - Summative Assessment
Building Oracy and Background Knowledge		Content		Formative Assessment
Reading Comprehension				
Writing				
Word Study and Fluency				
Summative Assessment				
Bridge - Transfer	Bridge – Transfer - Extension (includes: Listening, Speaking, Reading, and Writing in the other language)	Bridge: Metalinguistic Focus While the teacher plans a specific metalinguistic teaching point in advance of the Bridge, the teacher also accepts and highlights other areas of metalinguistics noticed by the students.		





What scaffolds are used?



 Sensory Supports	 Graphic Supports	 Interactive Supports
• Real-life objects • Manipulatives • Pictures • Photographs • Illustrations, diagrams and drawings • Physical activities • Videos and films • Broadcasts • Models and figures • Experiments • Experiences	• Charts • Graphic organizers • Tables • Graphs • Timelines • Number lines	• In pairs or partners • In triads or small groups • In a whole group • Using cooperative group structures • With mentors
Unified by a Theme or Topic – In Context Created with/by students and used by Students		

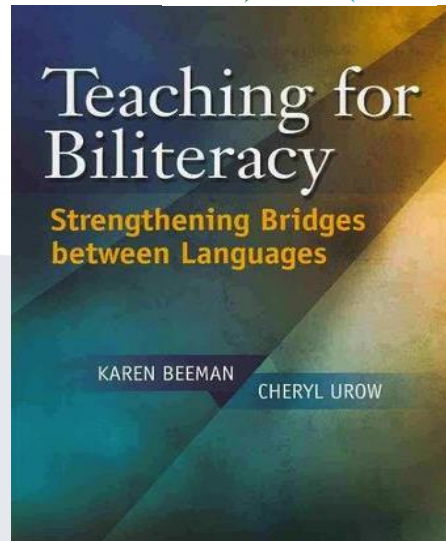
Supports



Strategies



Fishbowl



pp.82
pp. 136

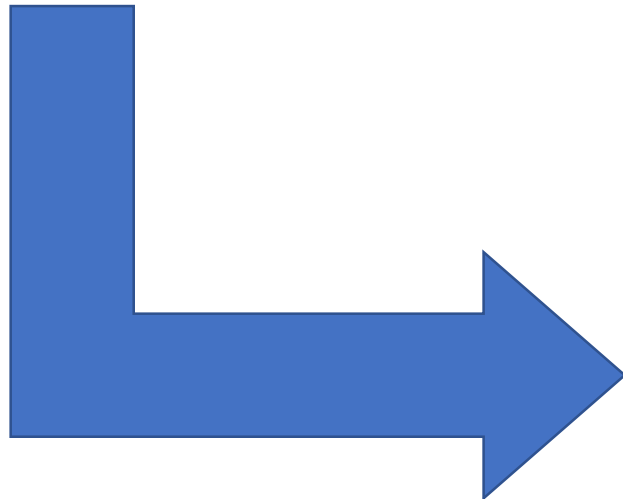
Fishbowl



Use when you want to
'show' students how to
do something rather
than tell students how
to do something.



Fishbowl

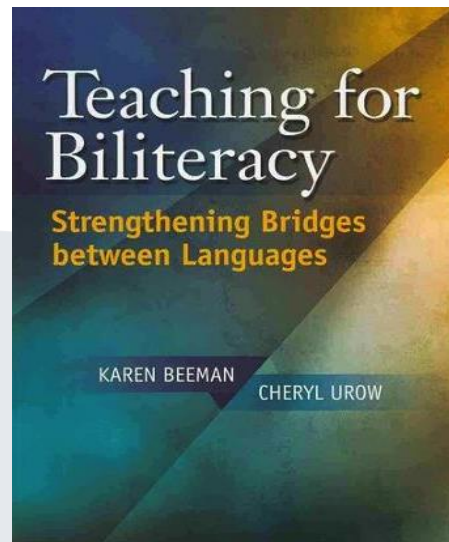


Things to keep in mind:

- Carefully select your 'fish'
- Provide the supports students would need to be successful
 - Graphic
 - Interactive
 - Sensory



Concept Attainment



pp. 81
135 - 137

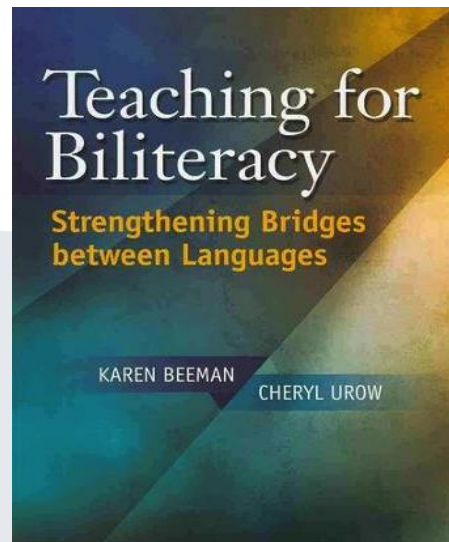
Concept Attainment: Building Oracy through a common experience

Living things

Nonliving things



Building Oracy: Total Physical Response (TPR)



pp. 81
135 - 137

Oracy Building through Total Physical Response (TPR)

Living and Nonliving



Strategy: Total Physical Response

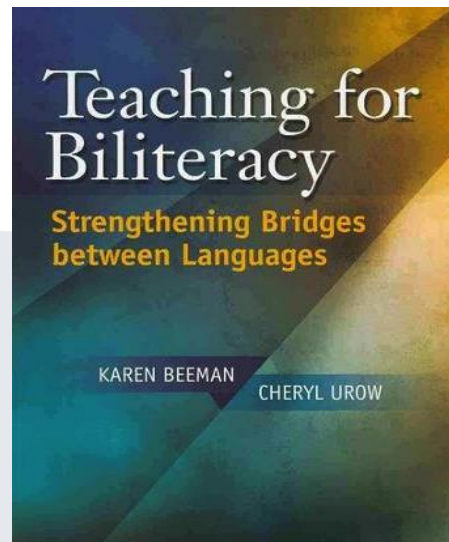


Total Physical Response

Things to keep in mind:

- Word to action
- Preview vocabulary
- Provide the supports that students would need to be successful
 - Graphic
 - Interactive
 - Sensory

Building Oracy: Sentence Prompts



pp. 83
92 -93

Sentence Stems

I believe that...

I believe that ... belongs to the... group because...

I agree...

I disagree because ...

I believe that

I still wonder...

Things to keep in mind:

- Preview vocabulary/concept to be emphasized
- Provide the supports that students would need to be successful
 - Graphic
 - Interactive
 - Sensory

Now you try!

What strategies would you use to develop oracy in this unit?

What language is important for students to know and understand within these standards?



**2nd Grade
Science Unit**

Now you try!

2-PS1-1. Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.

2-PS1-2. Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.

2-PS1-3. Make observations to construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object.

K-2-ETS1-1. Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.



Now you try!

1st Grade Social Science Unit

Economics and Financial Literacy Standards

Economic Decision Making

SS.EC.1.1: Explain and give examples of when choices are made that something else is given up.

SS.EC.2.1: Describe the skills and knowledge required to produce certain goods and services.

Financial Literacy

SS.EC.FL.3.1: Explain how people earn pay or income in exchange for work.

Illinois Learning Standards for Social Science-1st Grade

Inquiry Skills

Developing Questions and Planning Inquiries

Constructing Essential Questions

SS.IS.1.K-2: Create questions to help guide inquiry about a topic with guidance from adults and/or peers

Determining Helpful Sources

SS.IS.2.K-2: Explore facts from various sources that can be used to answer the developed questions.

Evaluating Sources and Using Evidence

Gathering and Evaluating Sources

SS.IS.3.K-2: Gather information from one or two sources with guidance and support from adults and/or peers.

Developing Claims and Using Evidence

SS.IS.4.K-2: Evaluate a source by distinguishing between fact and opinion.

Communicating Conclusions and Taking Informed Action

Communicating Conclusions

SS.IS.5.K-2: Ask and answer questions about arguments and explanations.

Taking Informed Action

SS.IS.6.K-2: Use listening, consensus building, and voting procedures to decide on and take action in their classroom.



Now you try!

Kindergarten Science Unit

Content

NGSS.K-PS2-1 Students will be able to move an object quickly or slowly and change the direction of the object by using the forces push or pull.

NGSS.PS2A: Forces and Motion: Pushes and pulls have different strengths and directions. Pushing or pulling an object can change the speed or direction of its motion and can start or stop it.

NGSS.PS2.B Types of interactions: When objects touch or collide, they push one another and can change motion.

NGSS.PS3.C Relationships Between Energy and Forces: A bigger push or pull makes things speed up or slow down more quickly.

CROSS-CUTTING CONCEPT: Students will understand that simple tests can be designed to gather evidence to support or refute student ideas about causes.

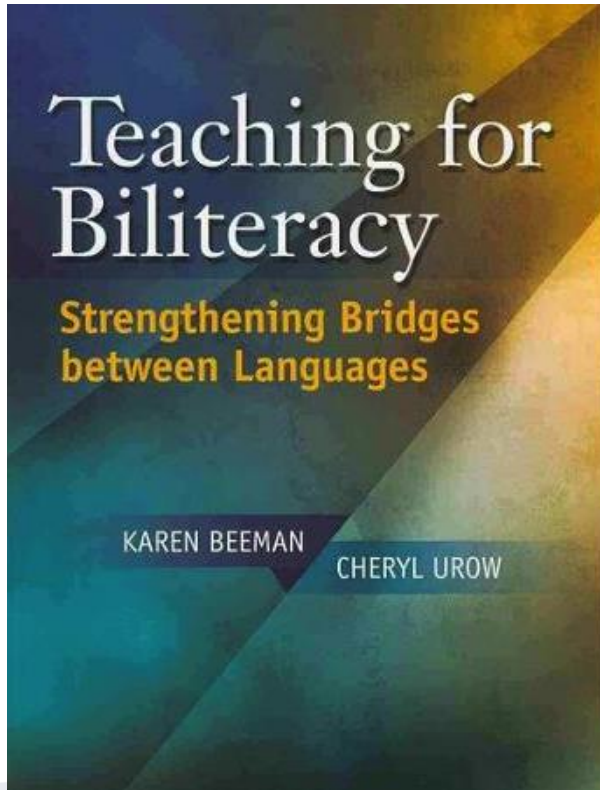


Stand and Share!

What language did you
extract from your content
standards?

How do you plan to teach
oracy?

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Thank you!

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