Games and Activities that Build Academic Vocabulary

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Session Agenda

- Warm-up Activity

- Research

- Application

- Reflection

Warm-Up Activity

- **Free Association**
  - Participants will be provided a target term.
  - Each member of your table group will take turns saying any word that comes to mind related to the target term.
  - When the facilitator tells you to stop, the last person to say a word will explain how that word is related to the target.
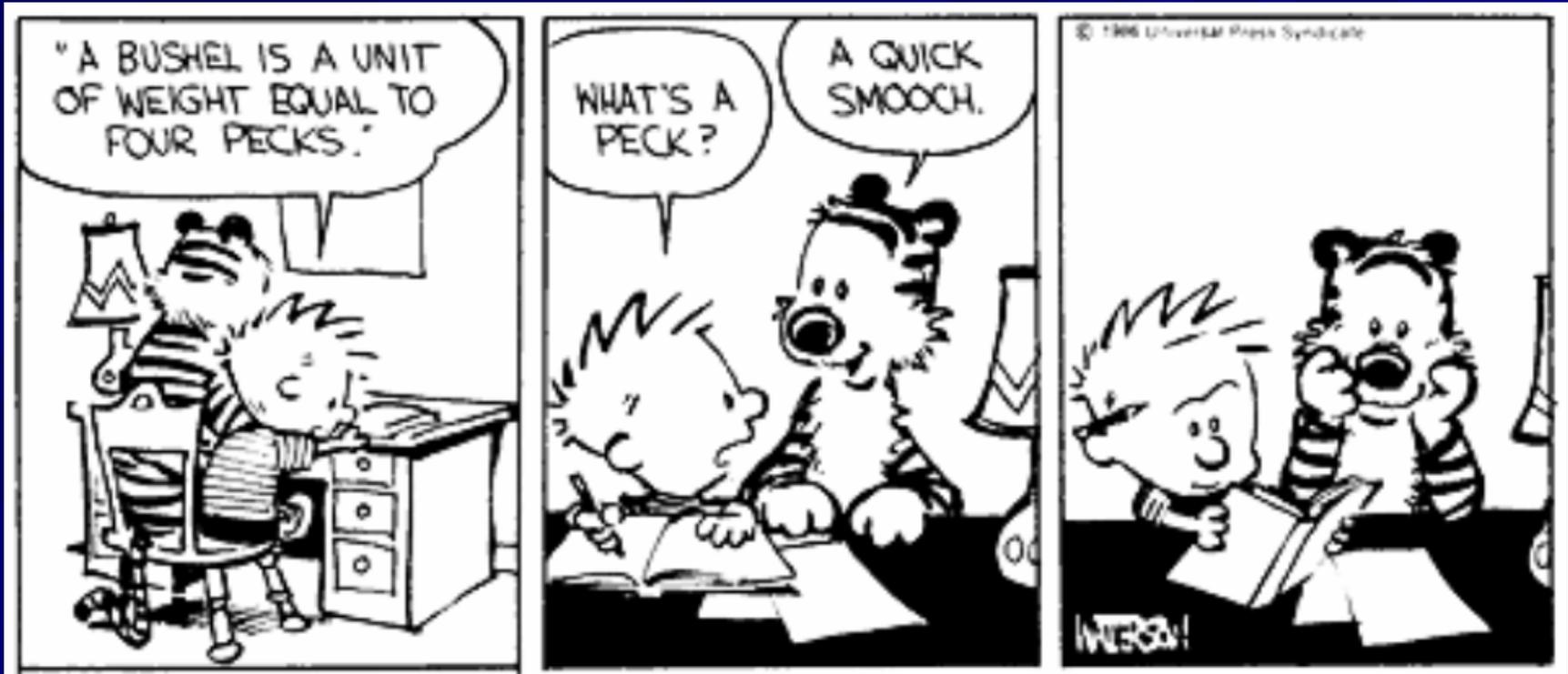
(Marzano, 2005)

Target Words

- Measurement
- Habitat
- Fairy tale
- Cultural tradition
- Government

What is Background Knowledge?

- Background Knowledge is what a person already knows about a topic.

- ACADEMIC Background Knowledge is what students already know about academic content.

Importance of Academic Background Knowledge

1. What students already know about academic content is one of the strongest indicators of how well they will learn new information relative to that content. In other words, there is a strong relationship between background knowledge and achievement.

2. Academic background knowledge affects not only "school learning," but occupation and status in life.

3. Success in school has a strong bearing on students' earning potential.

(Marzano, 2004, p. 1-4)

Relationship Between Education and Yearly Income

Level of Education	Yearly Income
Not a high school graduate	$10,838
High school graduate	$18,571
Some college, no degree	$20,997
Associate's degree	$26,535
Bachelor's degree	$35,594
Master's degree	$47,121
Professional degree	$66,968
Doctorate	$62,275

From US Census Bureau, March 2003

Acquisition of Academic Background Knowledge: Interaction of 2 Factors

Fluid Intelligence: Our Innate Ability to Process and Store Information

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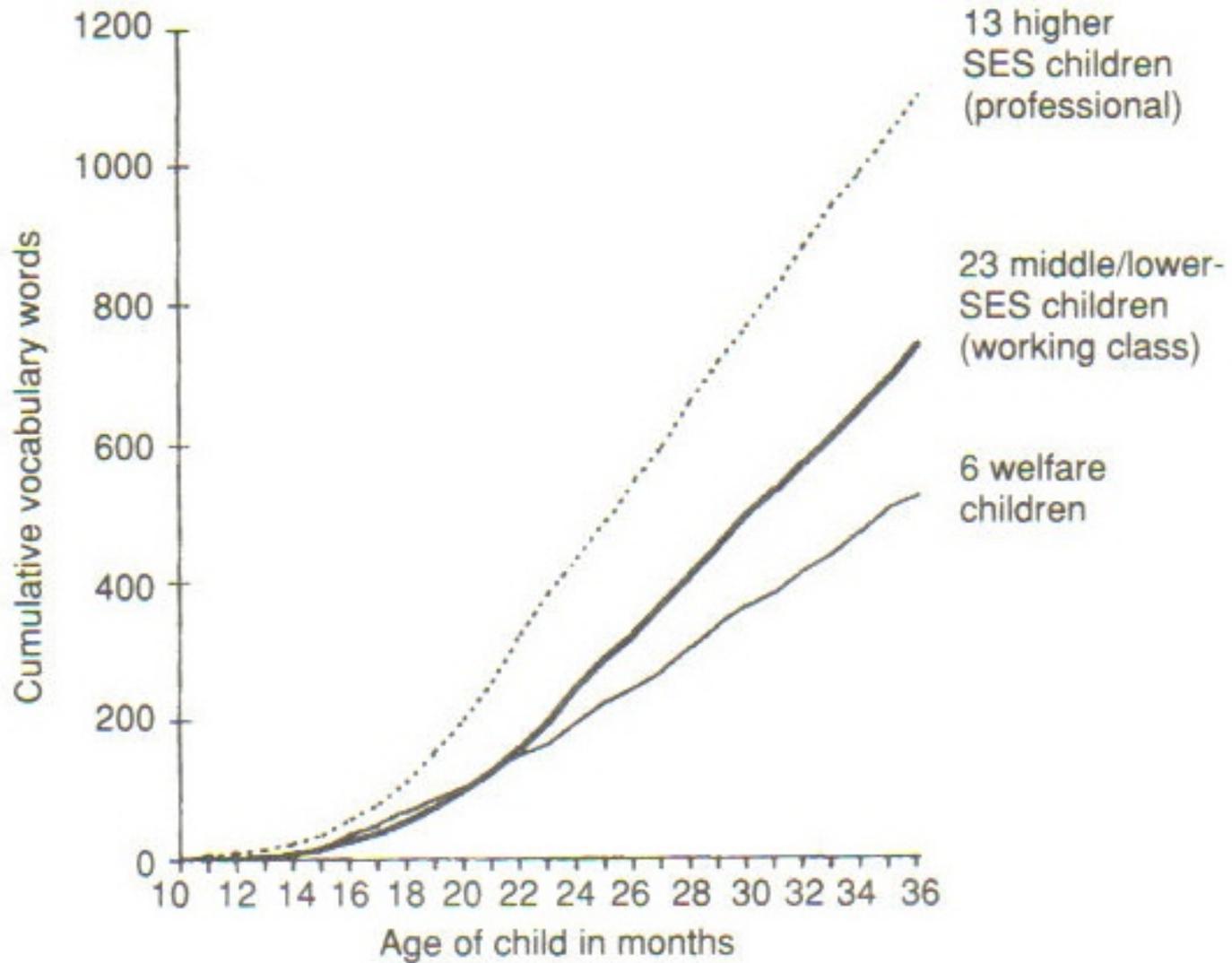Number and Frequency of **Academically Oriented Experiences**

Acquisition of Academic Background Knowledge

- There is a direct relationship between academic background knowledge and family income level.

- The average number of families living at or below the poverty line is disproportionately spread among ethnic groups in the U.S.

(Marzano, 2004, p. 8)

Fact Sheet Activity

- Read the fact sheet related to poverty.

- Mark facts that "jump out" at you.

- Discuss with others at your table. Think about implications for the student population you serve in your program.

Figure: Cumulative vocabulary words by age of child in months, comparing 13 higher SES children (professional), 23 middle/lower-SES children (working class), and 6 welfare children.

(Hart & Risley, 1995)

You Can Make a Difference!

Although a certain level of innate intelligence is important to academic success, learned intelligence is the stronger correlate of success in school. (Marzano, 2004, p. 13)

Fluid Intelligence: Our Innate Ability to Process and Store Information

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Number and Frequency of **Academically Oriented Experiences**

Two ways we can enhance academic background knowledge:
1. Direct Approaches
2. Indirect Approaches

Direct Approaches

What does it mean?
Directly providing a variety of academically enriching experiences, particularly for students whose home environments do not do so naturally, outside of regular school day activities.

Examples of direct experiences:
– Field trips to museums, art galleries, etc.
– School-sponsored travel and exchange programs
– Mentoring programs with members of the community
– Service learning

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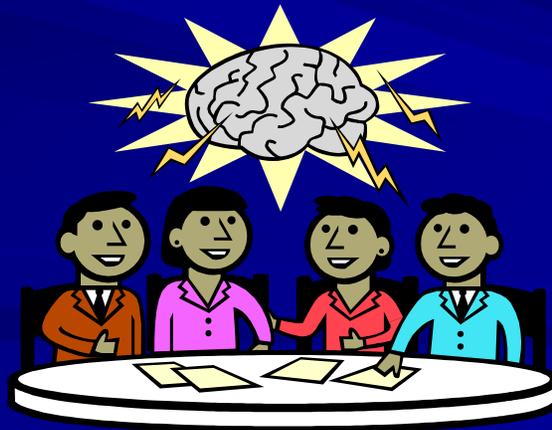
Indirect Approaches

What does it mean?

Experiences that can be fostered on-site without the time and resource commitment needed for direct approaches.

Example:

– Reading, talking/listening to others, or watching educational television to gain experiences related to Africa without physically traveling to Africa.

Small Group Brainstorm

How do/could we support both direct and indirect approaches to building background knowledge in afterschool?

Key Ideas for Building Indirect Approaches

- The more times we engage information in working memory, the higher the probability that it will be embedded in permanent memory.

- Even surface-level background knowledge is useful.

- Virtual experiences (e.g., reading, language interaction, educational television) can enhance background knowledge.

- Background knowledge manifests itself as vocabulary knowledge; therefore, <u>teaching vocabulary is synonymous with teaching background knowledge.</u>

(Marzano, 2004)

How do you determine appropriate vocabulary?

- Talk to day school teachers to determine vocabulary terms related to the content students are currently learning.

- Use pre-made vocabulary lists.

  – Building Academic Vocabulary: Teacher's Manual (Marzano & Pickering)

  – For the Love of Words: Vocabulary Instruction That Works: Grades K-6 (Paynter, Bodrova, et al)

- McREL's Compendium

  – http://www.mcrel.org/standards-benchmarks/

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- **Life Work**
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- **Thinking and Reasoning**
- **Working With Others**

Mathematics

Geography

Standards

The World in Spatial Terms

1. Understands the characteristics and uses of maps, globes, and other geographic tools and technologies
2. Knows the location of places, geographic features, and patterns of the environment
3. Understands the characteristics and uses of spatial organization of Earth's surface

Places and Regions

4. Understands the physical and human characteristics of place
5. Understands the concept of regions
6. Understands that culture and experience influence people's perceptions of places and regions

Physical Systems

7. Knows the physical processes that shape patterns on Earth's surface
8. Understands the characteristics of ecosystems on Earth's surface

Human Systems

9. Understands the nature, distribution and migration of human populations on Earth's surface
10. Understands the nature and complexity of Earth's cultural mosaics
11. Understands the patterns and networks of economic interdependence on Earth's surface
12. Understands the patterns of human settlement and their causes
13. Understands the forces of cooperation and conflict that shape the divisions of Earth's surface

Environment and Society

14. Understands how human actions modify the physical environment
15. Understands how physical systems affect human systems
16. Understands the changes that occur in the meaning, use, distribution and importance of resources

Uses of Geography

17. Understands how geography is used to interpret the past
18. Understands global development and environmental issues

Topics

1. Bias, meaning, and perspective
2. Biodiversity
3. Characteristics of places
4. Cities and their related regions
5. Climate types and regions
6. Colonies and colonial systems
7. Convergence and divergence of cultures
8. Cooperation and conflict
9. Cultural continuity and change
10. Cultural diffusion, adaptation, and interaction
11. Cultural regions
12. Development, ideology, and structure of political systems
13. Earth-Sun relations
14. Economic conditions and society
15. Economic development and growth
16. Ecosystems and biomes
17. Environmental issues
18. Geographic databases and technology
19. Geologic, atmospheric, and hydrospheric processes
20. Global economic interdependence and human society
21. Global power and influence
22. Group and national identity
23. Human response and adaptation to the environment
24. Impact of society on the environment
25. Impact of the environment on society
26. Influence of geographic features on historic events

List of Benchmarks for Geography

Standard 1. Understands the characteristics and uses of maps, globes, and other geographic tools and technologies

Level Pre-K (Grades Pre-K)

1. Understands that maps can represent his or her surroundings

Level I (Grades K-2)

1. Understands the globe as a representation of the Earth

Level II (Grades 3-5)

1. Knows the basic elements of maps and globes (e.g., title, legend, cardinal and intermediate directions, scale, grid, principal parallels, meridians, projection)
2. Interprets topography using aerial photos and maps
3. Uses map grids (e.g., latitude and longitude or alphanumeric system) to plot absolute location

Level III (Grades 6-8)

1. Knows the purposes and distinguishing characteristics of different map projections, including distortion on flat-map projections
2. Uses thematic maps (e.g., patterns of population, disease, economic features, rainfall, vegetation)
3. Understands concepts such as axis, seasons, rotation, and revolution (Earth-Sun relations)
4. Knows the advantages and disadvantages of maps, globes, and other geographic tools to illustrate a data set (e.g., data on population distribution, language-use patterns, energy consumption at different times of the year)
5. Knows the characteristics and uses of cartograms
6. Knows how maps help to find patterns of movement in space and time (e.g., mapping hurricane tracks over several seasons, mapping the spread of influenza throughout the world)
7. Knows the characteristics and purposes of geographic databases (e.g., databases containing census data, land-use data, topographic information)

Level IV (Grades 9-12)

1. Understands the advantages and disadvantages of using maps from different sources and different points of view (e.g., maps developed by the media, business, government, industry and military to show how a recently closed military installation can be utilized for civilian purposes)
2. Knows the characteristics and uses of geographic technologies (e.g., geographic information systems (GIS) and satellite-produced imagery)
3. Transforms primary data into maps, graphs, and charts (e.g., charts developed from recent census data ranking selected information on various topics, cartograms depicting the relative sizes of Latin American

Geography

Standard 1. Understands the characteristics and uses of maps, globes, and other geographic tools and technologies

Topic Maps, globes, and atlases

Level II [Grade 3-5]

Benchmark 1. Knows the basic elements of maps and globes (e.g., title, legend, cardinal and intermediate directions, scale, grid, principal parallels, meridians, projection)

Vocabulary terms

A. elements of maps

B. elements of globes

C. map title

D. map legend

E. cardinal direction

F. intermediate direction

G. scale

H. map grid

I. principal parallel

J. meridian

K. projection

Knowledge/skill statements

1. Knows the basic elements of maps

2. Knows the basic elements of globes

3. Understands the concept of a title

4. Understands the concept of a legend

5. Understands the concept of cardinal direction

6. Understands the concept of intermediate direction

7. Understands the concept of scale

8. Understands the concept of a grid system

9. Understands the concept of meridians

10. Understands the concept of projection

11. Understands the concept of principal parallels

Building Academic Background Knowledge through Vocabulary Instruction

- **Vocabulary Activities**
  - Free Association
  - Comparing Terms (Venn Diagram)
  - Analogies
- **Vocabulary Games**
  - Jeopardy
  - Charades
  - Pictionary

Vocabulary Activities
Word Sort

- Working individually, sort the word cards into categories.

- Each person determines his/her own categories.

- Once everyone at your table has finished sorting, share with others how you sorted your words and why you chose to organize them that way.

Vocabulary Games

Let's Play...

Jeopardy

Debrief Academic Vocabulary Activity & Game

- In your table group, discuss observations you made about the activity & game.

- Be prepared to share out some observations with the large group.

Tips for Helping ELL Students Learn New Academic Vocabulary Terms

- When possible, provide a description, explanation, or example of the vocabulary term along with a picture or other nonlinguistic representation.

- Allow ELL students to engage in activities in their native language to help them add to their knowledge of the terms they are learning.

- When playing vocabulary games, organize students of the same native language into pairs or triads allowing the bilingual members of the group to facilitate the games for their more monolingual partners.

Reflection

- One or two goals for helping students in my program build academic background knowledge….

- Strategies I can use to accomplish these goals…….

Please fill out your evaluation

Resources

- Jeopardy Template Download
  - http://www.graves.k12.ky.us/tech/jeopardy_instructions.htm

- McREL's Compendium, K -12 Standards
  - http://www.mcrel.org/standards-benchmarks/

- Paynter, Diane E., Bodrova, E., & Doty, J. (2005). *For the love of Words: Vocabulary instruction that works.* San Francisco, CA: Jossey – Bass.

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U.S. Census Bureau. (2003, March). *Table 9. Income in 1999 by educational attainment for people 18 years old and over, by age, sex, race, and Hispanic origin* [Online]. Available: http://www.census.gov/population/www/socdemo/education/

Games & Activities that Increase Academic Vocabulary
Fact Sheet: Poverty

- In 2006 the federal poverty level for a family of four is $20,000, for a family of three $16,600, and $13,200 for a family of two

- After a decade of decline, the proportion of children living in low-income families is rising again.

- Although Latino (63%, 8.9 million) and black (61%, 6.6 million) children are disproportionately low income, whites comprise the largest group of low-income children at 27% or 11.7 million.

- Twelve million children live in families with incomes below the federal poverty level, with 5 million of those children living in families with incomes less than half of the poverty level.

- The highest rates of extreme child poverty (children living at less than half of the federal poverty level) are concentrated in the South.

- Poverty can hinder a child's cognitive development and their ability to learn. It can contribute to behavioral, social, and emotional problems and lead to poor health among children.

- Students who do not graduate from high school likely condemn themselves to a life of poverty.

- Schools and businesses operate using middle-class norms and use the hidden rules of the middle class, which are not directly taught in school.

- Regardless of race or ethnicity, poor children are much more likely than non-poor children to suffer developmental delay and damage, to drop out of high school, and to give birth during their teen years.

- People leave poverty for one of four reasons: (1) a goal or vision to obtain something they want to be or have; (2) a situation that is painful and the belief that anything would be better; (3) an individual who convinces them they could live differently; or (4) a specific talent or ability that provides an opportunity.

- Children's scores on cognitive assessments are affected by the number of books they have access to and the frequency of trips to a museum.

- Between grades 1 and 3, it is estimated that economically disadvantaged students' vocabularies increase by about 3,000 words per year and middle-class students' vocabularies increase by about 5,000 words per year

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