ELICITING BACKGROUND KNOWLEDGE

Background knowledge is defined as "all knowledge learners have when entering a learning environment that is potentially relevant for acquiring new knowledge." Background knowledge may range from general familiarity with knowledge to having a deep understanding of it. This Bulletin explores how background knowledge can be utilized with activities in three time dimensions: how teachers can help students access their background knowledge in a subject/topic before it is taught; once it is taught, how students can activate their emerging knowledge once the topic has been taught; and finally how to build stable background knowledge in students for continued knowledge use.

I. ACCESSING KNOWLEDGE: How can I find out about what students know?

English Language Learners (ELLs) may know a great deal about a subject but 1) be unable to communicate their understanding coherently due to limited language proficiency; and/or 2) lack understanding due to the unfamiliar cultural context in which the content is presented. Thus, limited language proficiency in listening, speaking, reading, and writing may prevent an ELL from fully demonstrating knowledge of fractions in a word problem or of a story plot in a story when the setting is completely unfamiliar.

Recommendation: Use concept or theme webs and "minute papers."

Also called "mind maps", webs help to access what learners already know through visual splashes of information linking previous knowledge with the new knowledge to be learned. Two considerations here are important regarding ELLs: 1) expanding the language use of the visual displays through more extensive oral or written explanation of the ideas being generated; and 2) paying careful attention to possibly ambiguous or unknown cultural references.

For example, a class-generated web exploring background knowledge of Maine’s indigenous agricultural and ocean production may refer to maple sugaring and lobstering, two items which may not be familiar to ELLs. These need to be explained or clarified.

Once students create a web, ask students to orally summarize in small groups or to do a quick write, - "minute paper" - to explore what they already know. A "minute paper" is simply an approximately five-minute written summary of the tableau of ideas represented in the web.

Recommendation: Engage students in an activity such a 'focused dialogues' to generate motivation for the content to be
learned as well as to access prior knowledge. Focused dialogues are triad discussions that help students personally connect to what they will learn by talking about what they already know about the topic. In groups of three, each student is provided three or four questions about a topic. Each student takes a turn posing a question to their partners. After their response the student responds as well.

Example: Geography - Maps

Student A:
1. What is a map?
4. Where were you born? How did your students arrive there?
7. Have you ever used mapquest? How?

Student B:
2. Have you ever used a map for a trip?
5. Do you know people in other places? Where?
8. Where would you most like to travel to? How would you get there?

Student C:
3. How have you used a map before?
6. Describe your neighborhood. How do you get to school from there?

II. ACTIVATING KNOWLEDGE: How can I help students relate to what is being taught?

New content takes time and practice to become embedded in students' long term memory. Scaffolding new information onto what they already know through accessing previously learned knowledge is useful, embedding this newly acquired knowledge can be processed through performance activities.

Recommendation: Extend the use of graphic organizers by requiring additional language production. The world of graphic organizers (Venn diagrams, flow charts, pie charts, etc.) is varied and familiar to almost every teacher as a means of assisting students to summarize information. Although graphic organizers inherently summarize information, require learners to do a written summary of the information in the organizer. This will compel learners to create their own versions of the graphic summaries in their own words, thereby practicing academic language use, to express the encapsulated information.

Recommendation: Engage students in the use of grouping activities such as "carousel graffiti". These are shared responses to questions about a topic that has recently been taught. With questions on separate sheets of paper posted around the room, have students in small groups stationed at each question. Allow them a few minutes to respond before moving clockwise to another station to add their response to what a previous group has made.

Example: Ocean Unit
(On separate sheets of paper:)
1. What are the names of the animals that live in the ocean?
2. What kinds of jobs are dependent upon the ocean for making a living?
3. Name some of the challenges to the ocean environment.
4. How is the ocean used for recreation?

III. BUILDING KNOWLEDGE: What can the teacher do to build knowledge in students?

Creating contexts for building upon and expanding background knowledge can be accomplished in two familiar ways: 1) Direct experiences - field trips, demonstrations, and simulations; and 2) Virtual experiences - selected readings and targeted vocabulary instruction of content-specific words.

Recommendation: When feasible, connect content with direct experiences and always read aloud and teach specific content words to build background knowledge.

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SOURCES:
www.CAST.org, "Background Knowledge".