Edutopia - Are You Tapping into Prior Knowledge Often Enough in Your Classroom?

Learning progresses primarily from prior knowledge, and only secondarily from the materials we present to students, studies show. Think about that. We teachers spend so much time gathering materials -- important and necessary for good instruction -- but are we often enough using the greatest tools right there at our fingertips? All of those young minds, ready to go!

We are all guilty of hurrying through teaching some concept or skill, and not taking the time to slow down, ask the kids what they already know about the matter, and make important connections to what is to come. I'd like to offer some research behind why we need to cut that out and activities to help us.

The Research Behind It

<u>Constructivism</u> proposes that new knowledge is constructed from old. It holds the educational belief that as teachers, it's essential that we make connections between what new is being presented with students' prior experiences.

The Swiss psychologist Jean Piaget believed educating children to be one of society's most important tasks. And after much research, he concluded youngsters, like adults, combine prior knowledge with experience. Learners make sense of their experiences (and learning) using their own <u>schemata</u>. And there's John Dewey, a child-centered educator, as well as philosopher and psychologist, considered one of the first educational reformers. Dewey focused on the growth of a child's capabilities and interests more than the mandates of a curriculum. And both of these early education researchers influenced the development of constructivism.

Use It or Lose It -- PK Strategies

Launching the learning in your classroom from the prior knowledge of your students is a tenet of good teaching. In <u>an earlier post</u> <u>about scaffolding techniques</u>, I also wrote that asking students to share their own experiences, hunches, and ideas about the content or concept of study and relating it to their own lives should be done at the start of a lesson -- and throughout a unit of study.

Try these activities for firing up those young minds and tapping into prior knowledge:

- **Image Brainstorm**. Project an image on the LCD projector or smartboard and ask students to tell you everything they can about the picture. Choose images that make sense to them and also allow you to connect to the new content and/or concepts students will be learning. I often would use an image of famous artwork to launch our discussion on tone and mood in a particular poem or short story.
- **K-W-L Chart**. Tried and true, yes, though I have to say, it doesn't work with all subjects and can be an overused activity for assessing prior knowledge. Use sparingly and dynamically.
- **Picture Books**. No matter the age, they work like magic. If there's a concept or skill you are about to introduce, find a children's book that's related in some way and that your students may be familiar with. Read it aloud and watch the bells go off.
- **ABC Brainstorming**. I love this one. On one sheet of paper students make a box for every letter of the alphabet and then (they can do it in pairs) brainstorm a word or phrase that starts with each letter. For example, if kids are about to study the history of slavery in the U.S., they may write things like: "Africans" for *a*, "boat" for *b*, "chains" for *c*, etc.
- Class Brainstorm Web. Free-for-all, classroom fun I like to call it. After writing a word or phrase in a circle (whiteboard, poster paper) have students write as many words connected to it that they can think of around it. For example, you might write "photosynthesis" in the center and kids write things like, *plants, green, sun, water*, and *light*. I like to use a timer with this activity to create a sense of urgency (which adds to the fun). Keep the web visible throughout upcoming lessons and refer to it as you explore photosynthesis in-depth, even asking them to add words and facts to it.

If we don't ignite the prior knowledge of our students when we teach, we may fall prey to what the late Brazilian educational theorist <u>Paulo Freire</u> referred to as "the banking concept" in pedagogy -- treating students as if they are empty vessels waiting to be filled with the knowledge of the teacher. Basically, taking on a view that the kids have very little to offer to the classroom learning and discussions. Thank goodness we know this to be a ridiculous notion. We also know that when we use the schemata of students to genuinely shape and guide the learning, we may take some unexpected roads -- changing lesson plans and learning outcomes all together. And that's okay.