

# Building Background Knowledge: Implications for the Classroom

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## What is background knowledge?

Background knowledge is, quite simply, the knowledge that a person already has about a topic. In terms of education, background knowledge is made up of all the things a student know about the topic that is being read about or learned. To quote Fisher and Frey, “an individual’s background knowledge develops through interaction with people, places, experiences, Internet sources, texts and content formally taught.”

An excellent resource for learning about background knowledge is the article entitled [Building and Activating Students’ Background Knowledge: It’s What They Already Know That Counts](#) by Douglas Fisher, Nancy Frey and Diane Lapp, published in the Middle School Journal, January 2012.

## Why is background knowledge important?

The importance of background knowledge, both to reading and to learning, cannot be overestimated. In his article, [How Knowledge Helps](#), Daniel T. Willingham states, “the more you know, the easier it will be for you to learn new things.” He points out that background knowledge helps at three stages in the reading process: (1) it helps readers take in new information; (2) it helps readers think about new information; (3) it helps readers remember new information.

## What do I need to know about background knowledge as an adult education teacher?

The answer to this question is, “everything.” The reason that background knowledge is so important in adult education is that our classrooms are so very diverse. Students in HSE and pre-HSE classes vary widely. They may be single mothers, middle-aged adults forced to leave school when young, or immigrants from places as varied as the Caribbean, Africa and Asia. With their diversity in backgrounds, students also bring to our classrooms wide differences in academic background knowledge. These gaps in background knowledge can have a significant effect on students’ abilities to thoroughly understand academic texts.

Many texts presuppose knowledge that some HSE students may not have. A text that describes differences in class in Colonial America, for instance, may not be readily accessible to students who have no concept of social class. Likewise, a text in which societies based on market economies and traditional economies are compared and contrasted may not have

much meaning for students who had no idea that such a thing as a traditional economy ever existed. Much of the work of reading teachers, then, involves anticipating gaps in students' background knowledge and designing instruction to address those gaps.

### **What are some tips for making sure that my instruction helps students build background knowledge?**

In their book "Background Knowledge: the Missing Piece of the Comprehension Puzzle," Fisher and Frey outline three guiding principles:

#### **Background knowledge must be organized**

The need for organized knowledge relates to schema theory. A schema is a "hierarchical representation of knowledge, connected to other related information." For example, knowledge of the Civil War would include facts about who was fighting, the reason for the conflict, the approximate dates of the War, etc. In your brain, you have, in a sense a "file" for Civil War.

Background knowledge should be thought of as a network, rather than a long list of isolated facts. Let's say you learn a new fact: more people died in the Civil War than any other U.S. war. When you learn that most of the deaths occurred because of illness, that new fact would be added to what you know, building on what is already in the "file."

#### **Background Knowledge must be Conditionalized**

This means that learners know "when and where to apply it." Not all students know how to utilize the background knowledge they have. Teachers cannot just provide students with the information they need, but must teach them how to develop metacognitive awareness about what knowledge they already had when they read a text, and what is new.

#### **Background Knowledge must be Transferable**

Fisher and Frey point out that transfer, the application of new learning, is the ultimate goal of our teaching. Research shows that this is not always easy. New learners often have trouble doing this. One study showed that this was because novices tried to memorize a sequence than pay attention to the conceptual aspects of a task. Establishing "sub" goals can help students transfer knowledge, which is why it is so important that lessons break down knowledge into smaller "bits," and sequence them logically.

### **What are some of the best ways for adult education teachers to help learners build academic background knowledge?**

Background knowledge comes from direct experiences—field trips, personal experiences, movies—and from indirect experiences—reading and classroom instruction. For teachers, there are three main ways to help students build academic background knowledge:

#### **Wide Reading**

Fisher, Frey and Lapp state that “Reading is an excellent, indirect way to build background knowledge... The key to wide reading,” they say, “is simple: students must read books that they can read. It does not do much good in terms of building background knowledge (or a reader’s confidence) to make the reading task too difficult.”

While many teachers support the reading of whole books in class, it can be difficult to get students to “stick with” the reading or to develop a reading “habit.” At the CUNY Adult Literacy Program, a number of teachers have been experimenting with The Reading Project. The teacher chooses one book about the topic for all students to read—World War II, for instance, or Earth Science. Alternatively, the teacher may teach one or two lessons on the topic to the whole class. Teachers then choose three or four books that relate to the common content being taught in class, for instance, Earth Science, or World War II. Students choose from a limited number of books on the topic, read the books, and discuss them in groups. Reading Mentors—former high school equivalency teachers who are now attending college—are in the classroom to facilitate student discussions, model key comprehension and study strategies, and work with students who need extra help.

Lists of books used in the project classified by subject, as well as a detailed description of the project and a lesson plan to introduce wide reading to students can be found at the following links:

[Cunygedbookclub.wordpress.com](http://Cunygedbookclub.wordpress.com)

This book blog, with book cover images, brief descriptions, and excerpts, includes books that have been used often in adult education classrooms, with great success. Intended for both teachers and students, there are descriptions of the Reading Project and a lesson plan for getting started, in addition to comments from students who have read particular books.

[Cunyhistoryclub.wordpress.com](http://Cunyhistoryclub.wordpress.com)

Like the cunygedbookclub, this blog has cover images, book descriptions and excerpts and student comments. The books on this blog are intended to help students build background knowledge in (mostly U.S.) history.

[Gedscienceclub.wordpress.com](http://Gedscienceclub.wordpress.com)

Cover images, book descriptions, excerpts and student comments about books that on a range of science-related topics, such as earth science, chemistry, food, physics, and engaging biographies of famous scientists.

### **Documentaries and Websites**

It is not always possible to get students to read widely, even when we try to make the resources available and provide students with the time to do so. An alternative is to have students watch documentaries or short films or visit educational websites. While short films and website tours can be done in class, longer ones can be assigned for homework.

While adult students may not be able to do written homework due to time constraints, they may be able to watch documentaries with their children.

## **Curricula**

In adult education in particular, it's a good idea to use a carefully constructed curriculum aimed at helping students better understand the important concepts, facts and literacy strategies that relate to a particular discipline and content area.

### **How can I create lessons that help students build the background knowledge they need?**

In order to help adult students develop the background knowledge they need, there are several guidelines to follow.

#### **Choosing what background knowledge to focus on**

Fisher, Frey and Lapp assert that successful teaching “begins with a teacher’s ability to identify foundational knowledge needed to comprehend new information.” Teachers, they suggest, should ask themselves these questions:

- What do learners need to know?
- What do they currently know?
- How does this inform my instruction?

The authors differentiate “core” and “incidental” knowledge. “Incidental” knowledge is interesting, but does not get at the main concepts. “Core” knowledge needed to better understand the Civil War might include:

- Knowing which states are southern states and which northern states
- Understanding that the North and South were based on very different economies
- Understanding the arguments made on either side of the slavery debate
- Knowing what a “civil” war is

Incidental knowledge might include:

Knowing that Walt Whitman wrote about the Civil War

### **How do I know what’s “core”?**

Before constructing lessons about a topic, you’ll have to learn about it yourself, or at least fill in informational gaps. One of the best ways to do this is to read several texts. One of the best ways of determining what is “core” knowledge is to take note of the concepts and “main ideas” that are repeated across texts. Talking to a content area expert can also help.

### **What’s “core” in adult ed classrooms?**

Adult education classrooms pose a special challenge to educators, especially in New York City, where there is incredible diversity in the adult literacy population. Teachers need to take

into account the cultural and educational backgrounds of a wide variety of students. Foreign-born students, for instance, may not have learned much U.S. history. On the other hand, many foreign-born students may have very strong educational backgrounds, depending on the country they emigrated from. For U.S.-educated students, there may be a significant lack of academic background knowledge if students “turned off” to school early on and don’t read much.

In addition to content knowledge, teachers must take into account students’ expectations and cultural beliefs about school and learning. Do students have traditional ideas about school and learning? Do they think of themselves as passive “receivers” of learning?

Experienced teachers know that they cannot make assumptions about what students may or may not know. Informal assessment of the type and extent of students’ background knowledge must be built into lesson plans.

### **How do I assess students’ background knowledge?**

There are many ways to informally assess students’ background knowledge about a topic:

#### **Class discussion and brainstorm**

##### *Timelines*

One way to find out what students know about history is to do a class timeline together. Draw a line on the white or blackboard, divide it into centuries, and start from the beginning, asking students what they know. This “pools” the knowledge of the class, and also gets at misconceptions. Once the brainstorm is over, students can read to fill in missing information, then summarize that information and post it on the class timeline.

#### **Surveys, opinionnaires, and anticipation guides**

##### *One Question Interviews*

One question interviews are icebreakers that help students pool and exchange their ideas and information about a topic, bring that information to the class as a whole. This activity also helps teachers see what students know and think about a particular topic.

Click on the link to see an activity that uses a one-question interview to get at students’ ideas about reading in preparation for reading a text about it.

##### *Prediction/Anticipation Guides*

Anticipation Guides, also called Prediction Guides, are a series of true/false statements about a topic that are closely tied to a text to be read. Their purpose is to activate what students know or think they know, and raise questions in students’ minds to be answered by reading. For a description, see this link, which is on literacy.edu

### **How can I activate students’ background knowledge?**

## *Quickwrites*

Quickwrites are one way for students' to activate their knowledge about a topic. For quickwrites, a question is written on the board for students to respond to. For instance, students might be asked to write down, as quickly as they can, whatever they know and remember about volcanoes.

## *Images*

Photos in particular are a great way to build background knowledge for history. Students often have trouble visualizing and engaging in thinking about times past, but using pictures in a lesson can ignite interest. For instance, prior to reading about the Great Depression, students can work in pairs to look at photos of breadlines, evictions, etc., writing captions or describing what they see and what it suggests about the Great Depression. They will then have questions in their mind when they read. [Link to literacy.edu](#)

## **How can I reinforce and consolidate background knowledge?**

As teachers, we don't just want to introduce students to knowledge—we want them to retain the knowledge so that they can build on it as they continue to learn. This is why activities that provide opportunities for review should be built into lessons. A few methods for reinforcing and consolidating students' new knowledge:

### *Review Activities*

Review activities can include questions related to material already read; practice test questions for HSE exams; or filling in blank maps or diagrams with or without the original text. ReQuest is an interactive protocol for getting students to review material they've read. [Click here for an example \(literacy.edu\)](#)

### *Quizzes*

Quizzes are another way to get students to consolidate their knowledge. Quizzes can be teacher made or developed from student-generated questions. It's helpful to give a review sheet to students to study from—this only helps reinforce the idea of going back over material. [Click here for an example.](#)

### *Projects*

Posters and teach-ins are both ways to structure student review and consolidation of material.

#### *Poster presentations/Teach-ins*

After reading a text, students can work in groups to summarize a section of text, or present about a particular sub-topic, such as a branch of government, aspect of daily life at a certain time, location, disease, or chemical element. In a text about the various elements, for instance, each group can make presentations about the characteristics, atomic number and weight, and uses of carbon, hydrogen and aluminum. It's helpful to scaffold such an activity

first by having the whole class work to identify the type of information they need in a “practice” text. “Teaching” the material to the rest of the class gives the group an added incentive to stay on task and to be clear about what’s important about the topic.

### **What about student misconceptions?**

Often time students have misconceptions about a topic that will surface during the course of a class. During a lesson on the Civil War, for instance, the teacher discovered that one student thought Martin Luther King, Jr. had ended slavery. Experienced adult education teachers can sometimes anticipate students’ misconceptions; if not they often surface during class discussions.

If possible, it’s great when another student has information that contradicts a particular misconception. This can also happen as students work a text. In either case, it’s a good idea to return to the idea a few times to help the student understand.