

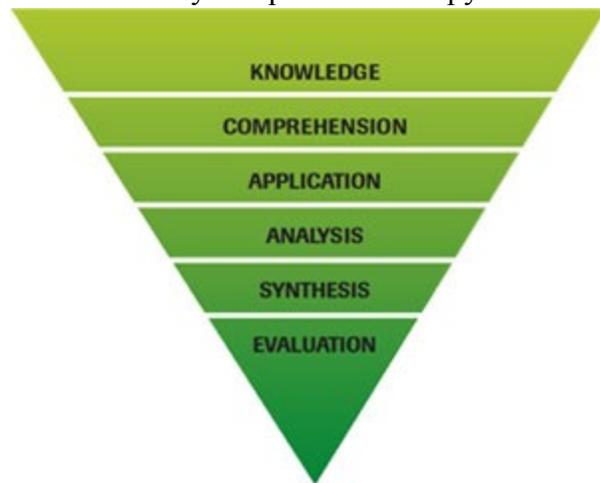
## Inverting Bloom's Taxonomy

By Sam Wineburg & Jack Schneider

The magic of Bloom's Taxonomy, that familiar classification system for levels of thinking (and hence learning objectives), was that teachers could close their eyes and picture it. And with a little help from entrepreneurial consultants, they didn't need to close their eyes at all—posters of color-coded pyramids became a standard part of classroom decor. The taxonomy was lean and intuitive, but the image of the pyramid gave it staying power. "Knowledge" formed the wide and stable base. "Evaluation" was the terrain of intellectual mountaineers.

Never mind the fact that Benjamin Bloom, the influential University of Chicago education professor who died in 1999, never used a pyramid to illustrate his taxonomy, much less for the purpose of teacher professional development. What mattered was the taxonomy *in practice*. In a postwar world marked by increasing specialization and fragmentation, the taxonomy was an antidote to chaos. Thinking, despite the many disciplines it came in, could be assayed and rank-ordered according to Bloom's levels. And there were only six categories, not 60. The taxonomy was easy to remember and easy to use, even more so when it was reduced to a pyramid.

There was only one problem. The pyramid was upside down—at least for the history classroom.



Knowledge of history, as those taxonomic pyramids imply, can function as a platform upon which students can stand to make judgments. But just as math is about more than learning theorems, history is about more than collecting facts. It is also a discipline that requires piecing together an accurate story from incomplete fragments. Historical thinkers begin by asking questions, evaluating what they don't know in pursuit of their ultimate aim: knowledge. And then they repeat the process.

But in thousands of history classrooms across the United States, that isn't what happens. Students work to learn the names of people, places, and events. Only then, once they've built up a storehouse of knowledge, are they asked to think about it. When asked about such practice, many teachers find succor in Bloom's Taxonomy. As one we interviewed noted: "I want kids to engage in critical thinking, but you can't think about nothing. You need a data base to get to all those higher-order places—analysis, synthesis, evaluation."

Without question, plugging up gaping holes in students' background knowledge is how many savvy history teachers begin each new unit. But many teachers we interviewed assumed that

learning the kind of information found in worksheets paves the way to higher-order thinking. That isn't what we've observed.

One particular case is instructive. Over the course of 2½ years, our research team followed 17-year-old Jacob, an Advanced Placement student at a private high school. In one interview after the AP U.S. history exam (on which he scored a 4 out of a possible 5), we gave Jacob a document and asked him to read it “historically,” articulating what he thought the piece was about, raising questions about its historical circumstances, and sharing insights about the text. In history, as in other disciplines, the aim is not merely to collect what is known, but to learn how to think about problems in a new way.

The document was a proclamation by President Benjamin Harrison in 1892. “Discovery Day,” as Harrison called it, honored Christopher Columbus as a “pioneer of progress and enlightenment.” In the schools, in the churches, and in “the other places of assembly of the people,” Harrison wrote, “let there be expressions of gratitude to Divine Providence for the devout faith of the discoverer.”

Jacob's response to the document was deeply revealing. “The first thing that jumps out,” he noted, “is that Columbus is a pioneer of ‘progress and enlightenment.’” But Jacob had his own opinion: “From what I've learned, his goals were not entirely noble. Just get rich, whatever; ... he claimed to be a true Christian, but he also captured and tortured Indians, so he wasn't maybe as noble as this is having him be.”

This response, typical among the group of AP students we interviewed, is in many ways ideal. Jacob marshaled background knowledge about Columbus and worked his way toward the Bloomian peak, eventually challenging President Harrison's praise for Columbus with his own critical alternative. His response, though unpolished and in need of elaboration, seems like critical thinking. And that's how the teachers we interviewed generally saw it. Nice job, Jacob. But then we asked a group of history graduate students what they saw in the document. And they saw something totally different. To them, the document wasn't about 1492—or even Columbus. To them, it was about immigration and voting. That threw us for a loop. Then we got it.

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These graduate students had no more specialized knowledge of Columbus than Jacob or his AP history classmates. They were writing their theses on topics like French colonialism in Tunisia and the aftershocks of the Meiji Restoration. But the advantage they had was the ability to think *historically* about the documents.

From the start, it was clear what the young historians were doing differently. As one began his reading: “OK, it's 1892.”

Our high school student Jacob knew the story of Columbus. But he didn't know how to read a document as the product of a particular time and place. To the historians, critical thinking didn't mean assembling facts and passing judgment; it meant determining what questions to ask in order to generate new knowledge.

Why, the young historians wanted to know, did Harrison make this particular declaration at this particular moment? Over and over, as they puzzled through the document, they asked “why?” In our dozens of interviews with high school students, not a single one ever did so.

Light bulbs soon started popping for the young historians. “The 1890s, the beginning of the Progressive Era, end of the century, closing of the frontier, Frederick Jackson Turner, you've got the Columbian Exposition coming up the following year. Biggest wave of immigration in U.S. history.” This one was on the scent. And then ...

“That’s it!”

At the end of the 19th century, America was getting a makeover. Seemingly overnight, immigration had transformed the country’s look, bringing “Slavs,” “Alpines,” “Hebrews,” “Iberics,” and “Mediterraneans” to the United States. Among these newcomers were millions of Irish and Italian immigrants who formed a new political interest group—urban Catholics. Harrison, in honoring Columbus, was pandering. “Discovery Day” appealed to millions of new voters by bringing them, along with a hero who was one of their own, into the fold.

Mystery solved.

Now *that’s* critical thinking.

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But what 17-year-old could be expected to marshal all of that contextual knowledge? A fair question. But remember, the young historians weren’t specialists in 19th-century American history. Or American history at all, for that matter.

From his AP class, Jacob knew this story better than the graduate students did. Yet to access all of what he knew—Ellis Island, Emma Lazarus’ “The New Colossus,” waves of immigration—he would have had to think about the document differently. He would have had to think about it historically. Jacob didn’t make the connection because he was thinking about 1492 and not 1892. For him, thinking began and ended with Columbus.

Jacob’s reading was critical, but there was little thinking in it. Sure, he brought background knowledge and strong opinions to this document. But he didn’t know how to get at the document’s untold story. He missed what really mattered.

To the historians, questions began at the base of the pyramid: “What am I looking at?” one asked. “A diary? A secret communiqué? A government pronouncement?” They wanted to know when it was written and what else was going on at the time. For them, critical thinking meant determining the knowledge they needed to better understand the document and its time. Faced with something unfamiliar, they framed questions that would help them understand the fullness of the past. They looked up from the text curious, puzzled, and provoked. They ended their reading with new questions, ready to learn. The high school students, on the other hand, typically encountered this document and issued judgments. In doing so, they closed the book on learning. For the history classroom, the pyramid posters need to be turned upside down, locating knowledge at the peak of the pyramid and not at its base. That’s because in history, as in other disciplines, the aim is not merely to collect what is known, but to learn how to think about problems in a new way. Students who think historically know that they need to begin with analysis: What is this? Who wrote it? What time does it come from? And, just as important, they know that their destination—new knowledge—isn’t critical thinking’s base camp.

It’s the summit.