Creating a Timely

A Conversation with Heidi Hayes Jacobs

Preparing students for tomorrow requires that we thoughtfully reexamine and rethink the curriculum.

Deborah Perkins-Gough

Education consultant Heidi Hayes Jacobs has worked with thousands of teachers in the United States and internationally to develop curriculum maps. Here she talks with Educational Leadership about curriculum changes that would better prepare students for the 21st century.

You're well known for your work in curriculum mapping. Could you explain to us what curriculum mapping is and how it helps teachers and students?

Curriculum mapping is a procedure for collecting data about the operational curriculum in a school and in a district—the instruction that students are experiencing. By mapping what's actually taught and when it's taught, teachers produce data that they can use in conjunction with assessment data to make cumulative revisions in instruction.

The key to mapping is that each teacher enters the data electronically. Colleagues share immediate access to the data, so they can find out what curriculum is being taught down the hall, what was taught in previous years, and what might be taught the following year. Because teachers have direct

access to this information electronically, they don't have to go to so many curriculum meetings. And when they do go to meetings, they can talk about the students' actual curriculum journey.

What led you to develop curriculum mapping?

In the early '90s, I worked with schools across the United States and overseas on how to improve the quality of their curriculum units and courses. In meetings, teachers would often refer to curriculum guidelines to help them make decisions about curriculum content.

It struck me that guidelines were being misunderstood. The function of a guideline isn't to tell you what kids have actually experienced; it's to provide goals. Think of the difference between an itinerary and a trip. An itinerary is my guideline for a trip. My real trip may look very different—in fact, it undoubtedly will.

At curriculum planning meetings, people were talking about what was supposed to have happened, but in fact that curriculum may not have happened. Learners may have taken longer on a particular unit. Maybe the teacher found a better way. Maybe some students moved more quickly. Nevertheless, people were making curriculum decisions on the basis of a false reality. To have an integrated

curriculum, we needed a more authentic picture.

How has your work in mapping prepared you to help educators think about curriculum content?

Mapping provides an active tool to give people better access to the truth about what's happening in classrooms—not just so they can keep track of curriculum content, but so they can change it in response to students' needs. When we examine maps, one of the tasks is to review curriculum
content and assessments for timeliness. After looking at hundreds of curriculum maps over the years, one thing that has startled me is how dated the content is.

Schools are launching pads, launching our kids into their futures. Unfortunately, a lot of what we teach now looks identical to what we taught 40, 50, or 60 years ago. There's a need for both timeless curriculum content and timely content. What seems to be falling by the wayside is timely content. We have to make decisions about what we shed and what we keep—and some of what we're holding on to is predicated on outdated ideas about the needs of Jason and Maria and Abdul and Sally.

Let's talk about some of the curriculum changes you see as important. What should we shed, and what should we keep?

Because most of our standards are written within subject areas, a good way to grapple with your question is to look at it through various subjects.

One important area is social studies, and one area that we should rethink is state history. People in the United States are highly transient. Families move from state to state. So why do we take a full year—in some states, two years—to study state history? It takes time away from more important topics.

For younger students, a deeper, richer study of U.S. history makes more sense. Rooted in the word history is story. And America's story is exceptional. It's amazing. Younger students should learn that we have always been and continue to be a land of immigrants—a land committed to bold new ideas. That's more timely than saying, "I have to know every detail about the history and geography of my particular state," when I'm likely to move in the next few years.

When we look at curriculum maps, we see early U.S. history repeated again and again throughout grades K–12. The result is that our students know almost nothing about the last 50 to 75 years of not only U.S. history but also world history. Teenagers tend to be defiant by nature, and they resist curriculum experiences that are reminiscent of experiences they had when they were younger. The curriculum for middle and high school students should build on the elementary school curriculum. Students should learn about recent U.S. and world history and global issues that are crucial for them as future citizens.

How do you see citizenship education fitting in with such a social studies curriculum?

Passive citizenship is a contradiction in terms. We need to rethink the design of citizenship courses. Students should look at such issues as defining active patriotism and examining viable dissent. The U.S. Constitution is a remarkable document that keeps growing, responding to each chapter in our
national story. Students should study it in depth as a commanding political and literary work.

Why not have a course in high school called Becoming an Active Voter? We have an extraordinarily low voter turnout in the United States. Kids say, "What difference does it make? Adults aren't voting." We create that passivity by teaching citizenship and government at kids as opposed to engaging them in issues-based, activity-based, voter-oriented, and yes, community service-oriented curriculum. Students should have opportunities to become politically active in their communities throughout middle and high school.

A recent report published by the Albert Shanker Institute, Education for Democracy, laments the fact that schools are not teaching students what it means to "be American." Does your view of citizenship education support that report's findings?

A lot of that report was right on target in terms of the deficit in student learning about the American experience, in part because of the disproportionate amount of time spent on state history. But the American experience is now more than ever an interaction with the world. Our students are also going to need to be citizens of this planet.

Whatever one's politics, it must be acknowledged that the United States needs to take a look at increasing students' global knowledge. It will be their world. The United States is geographically isolated, with only two bordering countries. According to the U.S. Department of State, only a small percentage of U.S. citizens hold active passports—around 10 to 12 percent—and in a given year, maybe 7 to 10 percent of those go abroad.

We need to prepare our students for a very different world. No matter where we live, our future will be shaped by global politics and global economics. Many state standards do not require global studies or pay little attention to them.

Our schools must take a hard look at building a strong sense of our national heritage and a respect for the marvelous country we live in—and at the same time the world in which it resides. Technology provides a link. Many remarkable programs allow kids to interact with their peers in other parts of the United States and abroad.

How about some other curriculum areas? What changes do we need in science and math?

Although we say we want to have world-class scientists, we often see a lack of rigor in science programs in the United States. We need to look at the various science arenas—environmental planning, earth science, space science, the life sciences, and the physical sciences, for example—more as a K-12 issue. We need a more balanced approach in the early grades, and we need to develop programs that support more independent science research.

If we wanted to have a world-class football team, we'd have a better shot at that team if we provided them with uniforms, equipment, coaches, and all kinds of support. If you want to have world-class achievement in science, school districts must provide more support in middle and high school to our first-string science students.

For example, in the state of New York, 10th grade students can participate in an independent scientific research project that will last three years. And every year, almost without exception, when the Intel-Westinghouse Scholarship awards come out, New York State students win at least 25 percent of them.

We also need to consider including in the science curriculum the ethical repercussions of scientific work—issues such as cloning, reproductive decision making, the international cost of phar-
maceuticals, and so on. These are issues that our students will have to deal with. At the same time, we need to maintain a separation between religion and the science curriculum in our schools. An educated person should know about religious beliefs and their impact on history and on the present, but social studies is the logical place for those studies, not science.

As for math, we have a real problem in the United States in math instruction for young children. We refer to this strategy as “snapshot mathematics.” Early childhood curriculum maps typically show four weeks of addition, four weeks of subtraction, four weeks of metrics, and four weeks of telling time—but little conceptual work. We move kids along rapidly.

Schools in other parts of the world have a longer school year and a longer school day. They have more time, but they don’t try to jam so much into the school year. In Japan, on average, students work through about eight math concepts in 8th grade. For each concept, students not only do the math, but they’re also able to tell you in their own words what they’re doing. In the United States, in 8th grade, students cover about 35 math concepts on average.

U.S. teachers need the chance to slow down and teach a more solid, language-oriented math curriculum. The instructional focus should be more on translating the language of mathematics. Frequently, I see math classrooms with row upon row of students watching a teacher speak fluently in mathematics. Student speech—genuine student reflection—receives minimal attention. To be literate in math, students need to practice listening and speaking skills—retelling, describing, and using analogies.

The overwhelming majority of assessments in math classes are still quizzes and tests. The rarest form of assessment in math is the formal examination of students’ ability to retell in their own speech what they’re doing. And yet, we’re teaching a language.

How about language arts? Educators often debate what literature students must read and what literacy skills they should have. What is your response to these issues?

We need to take a second look at more expansive and contemporary genre studies. Shakespeare is not only timeless but also relevant to the moment. The great works in literature are always timely.

But those classics also need to be seen in light of more contemporary genres. After all, what century are we living in here? Students should be reading screenplays and teleplays by the time they are in middle and high school. They should have a chance to write in those forms as well. They should be dealing with not only book anthologies but also Web site anthologies.

From early childhood, the curriculum should emphasize media literacy and criticism. We learn to critique books, but if there’s one pervasive influence today, it’s television. We need to give students more cognitive sieves so that they can sort out the impact of TV and think about “Who’s telling the story? Is this authentic? Am I being manipulated here?”

I’d love to see more work with video conferencing and electronic interviews. Students could interview others across the United States and in other countries. Which brings up another point about literacy: Modern language instruction is central to global literacy. A broader view of languages beyond the usual offering is important for our future and for our security needs.

How do you see the arts fitting into the curriculum for the future?

The focus on the arts is central to what it means to be human. Curriculum discussions in the United States often marginalize the arts. The education systems in most other countries—especially industrialized countries, but even developing ones—reflect how important it is to be culturally literate.

When I travel in other countries, I often visit museums. On occasion, I’ll see groups of students lying down on the floor with sketchpads. They’re clustered around some great works of art, making drawings of those works. And after they’ve done their own reproductions, their teachers ask them to do a drawing of their own that expresses the feelings that the artwork set off in them. These kids are not necessarily artistically gifted. This instruction is an active way to expand students’ minds and combine the essential components of cultural literacy and creative expression. This should be a fundamental experience of all our students, whether it’s a trip to a local art gallery or to the Metropolitan Opera.

We need to provide opportunities for studio work and performance work in our classes and also much more work with our local institutions. Although national institutions, such as the Kennedy Center or Carnegie Hall, and various local museums are often actively involved in trying to raise student awareness of great traditions of self-expression, we’re negligent in some areas. You’re very likely to see students writing original stories in an English class. But it’s rarer to find music programs in which students have a chance to do original music compositions, original playwriting and producing, or original choreography. Our arts program would be stronger if we had a balance between more cultural literacy—for
example, appreciation of great music performance—and opportunities for more original work in a range of forms.

Are state content standards holding back the kind of innovations that you've described? Or can they be a positive force in making the curriculum more timely?

Every state is different. The United States does not have a national curriculum, nor will it ever, as long as funding comes through states and localities. It's as if there were 50 countries with distinctive approaches to standards.

In general, though, one would have to argue that most states are not seriously focusing on the questions we're raising here. We cannot operate as though standards are fine the way they are, as though knowledge stands still. Standards need to be constantly debated and rethought. The American Medical Association regularly reviews medical standards on the basis of best practice and what's timely. You don't want people using medical standards established 40 years ago—and yet, in education we do that. There is a great unevenness in how individual states are handling hard questions, on a regular basis and in a formal way, about the issue of timeless and timely content.

Unfortunately, educators are confusing the push for state testing through No Child Left Behind with the standards movement. Most educators want to be responsive to students and to the larger world. But the discussions in our communities about curriculum—are some of these standards unimportant? Should some be dropped and others added? Can we make some a little better?—aren't happening. Those discussions are being overridden by the focus on two or three testing days when 3rd graders sit anxiously for three hours, knowing that they may be held back because of their inability to do well on a restrictive set of test items.

In different parts of the United States, different sections of standards are outdated. But even if the majority of schools wanted to upgrade them or rethink them, their hands are tied because they're juggling this testing dilemma.

We hear school leaders say, "Listen, the main thing is that our students have to pass these tests—no one's really holding us accountable for dealing with all of these standards. So we're going to have to focus on the standards our students are being tested on." That's the reality. That's what's playing out there. It amounts to a curriculum ambush.

How can schools and teachers deal with that test pressure?

The field of education, like every other field, keeps growing and altering. The tests will be refined and improved. But no matter what happens, the one subset of skills that's requisite for any test or any assessment is literacy. Every test these kids take entails reading. Schools can't lose when they help students become more discriminating and discerning readers; more critical responders in their writing; and more effective speakers, reflective listeners, and active note-takers.

All of those skills are worth working on throughout the grades. If schools put more time and attention into cross-disciplinary literacy and K–12 mapping of literacy, students will do better in all classes. And when the students encounter any kind of testing situation, their performance levels will increase. Every test is first and foremost a language test.

One of the big messages that has
come out of curriculum mapping is the absence of consistent approaches to reading, writing, speaking, and listening in every single class. Learning will always rely on language capability. That's true in every subject—even physical education, where kids have to listen very carefully so they don't look silly when they go out on the basketball court.

The focus on literacy across the grades and subjects is a direction worth pursuing, even as we debate and wrangle over the power and the nature of testing.

**How does curriculum mapping contribute to our continuing efforts to improve curriculum?**

Curriculum mapping has great potential to help educators reexamine and renegotiate content standards.

Mapping isn’t like anything we did 10 years ago. We couldn’t have done it then—it’s electronic. I can make changes on a curriculum map immediately because I can go to my computer, pull up the map, and enter changes. Standards are not filed away on dusty shelves. We can electronically begin to rethink, renegotiate, look at performance data, and look at changes in the world. As better Internet-based programs have emerged and teachers have had more input, we are merging assessment data directly into the maps.

Electronic mapping can give teachers immediate and powerful control over the curriculum. And in the future, who knows? I think most communications will be paperless. We’ll be communicating in a more timely way—and also, I hope, about an expansive, contemporary, timely curriculum.

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