"The Blue Blood is Bad, Right?"

Schools can encourage powerful learning when they structure the curriculum around the questions students care about most.

by Katherine G. Simon

The health teacher was lecturing about the circulatory system, drawing red arteries and blue veins on an overhead. She explained that the arteries carried oxygen-rich blood out from the heart and lungs and that the veins carried oxygen-poor blood back. She wrote out the names of various blood vessels, large and small. After her description of the whole system, a student raised her hand and asked, "So is there something wrong with the blue blood?" The teacher answered that the blue blood needed more oxygen; it was on its way back to the lungs to get it.

The teacher continued to lecture, taking a few other questions. Then the same student raised her hand again. "The blue blood is bad blood, right?" The teacher said that it was not really bad blood; it was just "deoxygenated," and went back to her lecture. Observing from the back of the classroom, I thought the student still looked puzzled.

After class, I approached the student and said, "It sounds like you're really interested in why the blood turns blue." She immediately pulled up her shirt sleeve and showed me her inner arm. "See? I have all of these blue veins. And I have sickle cell, and I want to know if that's the bad blood."

The student's words bowled me over. She had sickle cell anemia. She wanted to understand more about her own blood.

From a certain perspective, there is nothing personal about the circulatory system—it is completely standard, academic material, easily abstracted into overhead projections and blue and red ink. But for this student, there was nothing standard, academic, or abstract about the circulatory system. She longed to know more.

This student was doing what I believe all students ultimately would like to do with the material they study. She wanted to find a way to connect school material to the questions she cares most about. But in a classroom that didn't encourage connecting subject-matter to life, the student did not know how to formulate her question clearly. The teacher, having answered the student's question in a factual way, seemed unaware that what she was teaching—if she could link it to students' deeper questions—might touch them, help them, give them power to understand and to act.

Curiosity at the Core of Curriculum

All too often, curriculum planning focuses on teaching inventories of facts. But when designing curriculum, it's helpful to step back and ask, "How have human beings acquired the knowledge that we now want to transmit? How is it that we know so much, for example, about the inner workings of the body?" I would argue that we know as much as we do about the body because many human beings, in many cultures, over time, have been gripped with a need to know. They have asked, "What makes this body of mine work? What causes disease? What can I do to keep my body healthy and strong?" Important, intrinsically fascinating questions such as these, questions about our existence and how we should act, have driven the human acquisition of knowledge in all of the disciplines. Every subject we teach would be more engaging if we considered how it links to the questions that human beings perennially ask and then structured learning around these questions.

As it stands, questions rarely drive our curriculum—but we can change that. I have worked with many teachers who have been interested in creating courses or units around what we at the Coalition of Essential Schools refer to as essential moral questions or provocative propositions (for more on these terms see Onosko and Swensen,1996). Such courses do not require a trade-off between substance and student interest. Students pursue content in the context of questions that matter.

Essential Moral Questions and Provocative Propositions

"Truth does not serve our needs." So proposed the blackboard in Bill Ouellette's classroom at Thornton Academy in Saco, Maine, as his eleventh grade English students entered the room at the start of a new unit. Bill had his students respond to this statement in a few minutes of writing and then in small group conversations. All of them, at some point in their lives, had grappled with whether or not to tell the truth, how much of the truth to tell, to whom, and when. Some of them might have been a bit surprised to discover that this proposition would escape the lips of a teacher—even for purposes of discussion. Many of them were intrigued to discover that the issue of truth was a key concern of some of the great literature they were slated to read.

Bill, in fact, credited inspiration for his organizing theme to Blanche Dubois in *A Streetcar Named Desire* who says, "I don't want realism. I want magic....I don't tell truth. I tell what ought to be truth." The proposition also captures essential elements of several of the other works of American literature that Bill planned to teach — *Death of a Salesman*, *The Great Gatsby*, *The Scarlet Letter*. Bill presented the proposition as a provocative idea to be explored, first in light of the students' own experience, then in light of the experiences of the characters in the literature, then in the wider world of contemporary life.

This is the sign of a powerful essential moral question or provocative proposition: it has the potential to cause students to reflect deeply on their own lives, on the content matter at hand, and on wider social issues. Some of Bill's students told him that they've never thought so hard about something that mattered so much. One student wrote, "Dear Mr. Ouellette, thanks for making me think more than I have in any other class. I've learned a lot more about certain things this year in English than I have in my whole school life. . . ." Another student, reading Tim O'Brien's *The Things They Carried*, commented: "After we wrote about why people lie, I began to ask myself whether this guy was telling the truth." As this student was questioning the veracity of the war stories in the novel, he was beginning to recognize an essential idea of fiction, the paradox of

truth in fiction. On his own, he was asking a central question of the unit's organizing them, "Are storytellers liars?"

Powerful Antidote to Fragmentation

In a typical secondary school, students trek from one subject to another, with no continuity between classes. When curriculum is organized around essential moral questions or provocative propositions, the potential exists for students to make powerful connections between the subject areas, while learning key content in each.

Peter Babb, Janice Chen, and Matt Huxley at Drake High School in San Anselmo, California, are in the process of creating a two-year program for 9th and 10th graders, integrating the studies of English, social studies, and biology/chemistry, and organized through the investigation of "essential moral questions." Their first unit, piloted last spring, asked students to explore the question, "How can we respond to human suffering in ways that promote dignity?"

A multidisciplinary investigation of disease provided a key focus of the unit. Students studied fairly standard biology content—including topics like cell replication and division, the immune system, and the workings of viruses and other pathogens. They improved their lab skills and their understanding of scientific method. But as they did their lab work, they kept their social science and humanities hats on, knowing that their aim was to link their scientific understanding of the processes of disease with its social ramifications.

In their English and social studies classes, they explored questions like these: "What is the socioeconomic impact of particular diseases?" "Does society have a responsibility to treat diseases?" "What are our individual roles in their prevention, containment, and treatment?" Students conducted research projects into the social and medical history of diseases in which they were particularly interested.

How do teachers manage assessment when students have followed their interests, exploring moral and existential questions? When students investigate issues that have implications for their own lives and in the

real world, it makes sense to have them create products that will be useful beyond the classroom. For this project, students used their research to create a handbook with vital information about a number of diseases. They wrote essays explaining choices they would make about how to allocate limited resources for care and treatment of specific diseases.

For the unit finale, the students sponsored a day-long seminar on a number of diseases, including AIDS, Alzheimer's, asthma, breast cancer, flu, leukemia and sickle cell anemia. With other students and adult guests from the community—including those with direct experience with particular diseases—the students facilitated discussions on the diseases and their personal and social impact. Science and society, personal and public came together in extremely powerful ways. The students were fascinated, making comments including, "I thought more about diseases and their effect on the world than I ever would have before," and "I learned a lot more from this project than I would from any lecture." Students signed up for the new essential moral questions theme cluster in droves, forcing the teachers to hold a lottery to determine admission for this school year.

A Framework for Designing Units

Teachers interested in designing units around essential questions may follow a simple framework. Begin with a provocative proposition or question that

- Addresses an essential element of the subject matter or subject matters,
- Is immediately provocative to a particular group of students, and
- Cannot be fully addressed immediately, but will be illuminated over time, explored anew in the light of new learning.

Next, imagine a final assessment in which students could exhibit their learning. Then "plan backwards," putting together sub-questions and case studies that will provide the students with concrete subject matter through which to explore the core issues. In the following outline from an American History course, particular questions, activities, and assessments are used merely as examples:

American History Course

Course Title	The Conundrums of Democracy
Framing Question or Provocative Proposition	Does democracy result in effective, representative, and humane governance?
Final Activity/ Assessment	Create a dramatization, including a written text, of a particular episode in U.S. history that demonstrates the extent to which democracy does or does not result in effective, representative, or humane governance.
Sub-Question 1 and Case Study	Should the public vote on complex policy issues? Case studies on ballot initiatives in one's state.
Activities/Assessments for Sub-Question 1	1. Create an ad campaign for or against a current ballot initiative. 2. Research aftermath of previous ballot initiatives, such as California's Proposition 13 or 227.
Sub-Question 2 and Case Study	What connections are there between wealth and political power? Case studies on the rise of labor unions and on current campaign finance laws.
Activities/Assessments for Sub-Question 2	1. Research the funding sources and policy stances of a favorite politician. 2. Conduct an interview with a union representative and research labor history in his or her union.

The Habit of Asking Moral and Existential Questions

Like others who have argued that school should be focused more on developing "habits of mind" than on ingesting particular sets of information (see Sizer, 1992; Meier 1995), I am arguing that school should be a place to practice the habit of inquiry into moral and existential questions: "What are the implications of what I am learning for my own beliefs and actions?" "How does this material help me understand life and my place in the world?" As students at Drake High School and in Bill Ouellette's classroom would attest, asking such questions has the potential to make students care more deeply about school.

The following classroom anecdote, shared by a colleague, captures the importance of making moral and existential questions central to our curriculum. The teacher was teaching her first grade students about Rosa Parks and the Montgomery Bus Boycott, explaining that the law in Alabama at that time dictated that blacks sit in the back of the bus, whites in the front.