



"It is critical to break down barriers among disciplines and between the classroom and the world that exists outside."

Michael Goodwin

11th–12th Grade English

Michael Goodwin grew up surrounded by books and ideas. Considering that his parents were both writers—his mother is the Pulitzer Prize-winning historian Doris Kearns Goodwin and his father, Richard N. Goodwin, is a former presidential speechwriter and a successful journalist, author, and playwright-it seems natural that he gravitated toward a life that embraces the import of critical thinking, the value of public service, and the power of literacy. "I recognized that providing equal educational opportunity is perhaps the most important task of our time," explains Goodwin about his decision to become a teacher. Goodwin first launched his experimental interdisciplinary program, Rivers and Revolutions, in 2010, as a twoweek tuition-free summer intensive for secondaryschool students. It has since grown into a semesterlong accredited "school within a school" that offers blind admission to interested juniors and seniors at Concord-Carlisle, where Goodwin himself went to high school, and where he has taught since 2008. The pioneering program's main mission is to provide students with a meaningful context that unifies the various strands of study in a traditional curriculum.

ver since I was a teenager I have wanted to be involved with education. When I went home after my first day of high school, I envisioned coming back years later, clutching a grade ledger and an attendance book. Ironically, I did just that.

Mr. Goodwin and his students canoe along the Sudbury River to Fairhaven Bay—a favorite spot of Thoreau's.

I wanted to teach high-school students because they are at a very hinge-like moment of transition. You're capturing them at such a critical time. And there's a piece of me that's very academic so I really love reading complicated texts and talking about big, meaty ideas. The capacity of older students to engage in that work is great, but it is still hard to reach everyone no matter how enthusiastic I can be. If I get up and teach about the events that led up to the American Revolution, and I reenact the ride of Revere, Dawes, and Prescott to warn that the British are coming, no matter how exciting I make it—and I can really ham it up—not every kid is going to connect to the historical narrative. However, if I bring in The Midnight Ride of Paul Revere by Grant Wood—this really odd and bizarre painting made during the Great Depression—all of a sudden I've captured, perhaps, those two or three kids who needed that visual. I've found that the more I bring art, music, and science into what I am teaching, the higher the level of engagement. It's all about creating a greater number of access points.

"Really good education is all about risk-taking and about making a mess; learning is chaotic, right?"

There are very few schools that purposefully try to create lines and connections between different fields. The way most high schools are set up, you're in history class, and then the bell rings; then you go to science class, and then the bell rings.... You go through a whole day and a whole semester constantly being pulled from one thing to the next. I think that prevents students from having the time and space to really develop a relationship with the material. I find it is critical to break down barriers among disciplines and between the classroom and the world that exists outside.

I am currently running an interdisciplinary, experiential "school-within-a-school" program of my own design: Rivers and Revolutions. Through the lenses of literature, social studies, mathematics, science, and the arts, teachers and students investigate the following units of study: rivers, revolutions, air, fire, love, migration, seasons, and equilibrium. Time in the classroom is matched by time in the field as the cohort explores sites of cultural, historical, and ecological significance.

I wanted to make sure that these units were broad

and would provide us with the capacity to actually reflect on the human condition. So, all these phenomena sort of tie the world together and are bigger than just the human experience and bigger than just a specific place or specific time or specific culture. For example, we're studying love right now and we are considering the question, "How can you define love?" How have poets and novelists tried to do that? We're acting out scenes from Shakespearean sonnets about love but we're also studying what attracts people to each other through biology and even chemistry. We are studying the symmetry in a person's face and evaluating the mathematics of attraction through population growth and magnetism. We are creating life-size body maps in order to better understand ourselves in relation to those we love. What is the conversation surrounding love and social movements, or the Endangered Species Act, or social justice? What are the different ways of thinking about love, and is love ultimately definable?

Really good education is all about risk-taking and about making a mess; learning is chaotic, right? And if you don't have an environment in which there is a sense of trust, then teachers and students are going to be a lot less likely to engage in those kinds of risky activities. I'm constantly encouraging students to step into zones in which they're not totally sure they can succeed, where they maybe feel slightly unprepared, because that's where growth really occurs. So, when you create a space that is not specific to one field of study, that's not particular to one notion of intelligence, it really allows a much greater number of students to come to the table, to share what they learn, and to gain a greater sense that they can achieve and that they have something to offer.

The inspiration for Rivers and Revolutions derived from the fact that I spend a lot of time by the river and it just struck me: How cool would it be to study the river through science, mathematics, literature, history, and the arts? It was my wife who thought of the companion idea of revolutions. We played with that idea and then the course thematically unfolded. One way to think about the span of a river is that it starts up as a little mountainborn stream and then rages downhill, joins up with other brooks and streams and becomes the river that meanders and then, in old age, enters the ocean as its final destination. You start here, you end there. But of course, the whole time water is evaporating, feeding the atmosphere and coming back down as rain and feeding the brooks. So, there's also something very circular about that

relationship. And with revolutions, that same phenomenon is going on where, in a linear sense—historically—you're moving along, there's major upheaval, you keep moving along and there's another upheaval.

Students who enter the program leave the main-stream curriculum for an entire semester, making a choice to enter a very different educational environment in which much of the work is hands-on, and where all of the work is connected to the lived experience of the students—it is akin to going abroad for a semester, but it doesn't cost anything extra and it's on campus. Our program is open to juniors and seniors and in our pilot year we were successful in attracting a true diversity of students; in fact, we are currently the most heterogeneous class in the high school—in terms of race, ethnicity, and socioeconomic status, as well as academic ability.

It's only 10 to 15 percent of the day that there's a teacher in front of the room directing. It's very much students working with one another. Further, all students in the program take on a formal stewardship role in which they leverage their learning in the program in the service of an ongoing project in the community. Instead of exams, students submit synthesis projects that allow them to make connections across disciplines by creating an artifact that represents their interests and passions. At the conclusion of the semester, students—in groups of five—offer a full day of instruction to the entire cohort, exploring a topic that connects to the thematic arc of the program as a whole. Teachers take on the role of students. But students also take on the role of teachers.

Also unique to the program is the embedded professional development for the teachers. The five core teachers in the program are in the room all the time; when the math teacher is teaching, I—the English teacher—am also there, helping to support the instruction but also playing the role of student. There's also a history teacher, math teacher, science teacher, and arts teacher. So, even though we all take turns planning the lead instruction, we are also always there to help make sure the conversation stays coherent and stays interdisciplinary.

Team-teaching is a big change for teachers in the program. Teachers are used to having control over the classroom. You shut the door and basically it's your zone. Typically most educators are observed a handful of times a year and that's formal evaluation—a static snapshot to assess a teacher. I think that's a huge barrier to instructional improvement, because if you're not being observed

and observing others regularly, it's really hard to continue to grow as an instructor. In our classroom we're making collective decisions about everything—from deadlines to content to what projects should look like. And we're all watching and learning from each other.

Perhaps the greatest frustration I have faced was the resistance I met when bringing Rivers and Revolutions to the high school. Thankfully, I had a strong network of support that helped to keep me focused on providing an alternative for students for whom the mainstream curriculum was not working. The larger challenge, of course, is that the fragmentation and alienation that define most curricula also mark the entire educational landscape. How to help the public-school system re-envision its very purpose, how to bring holistic and innovative practice into all schools for all students, are the central questions I now grapple with as I consider the next phase of the work.

You're one of my heroes. I want you to know that. Your passion for teaching is inspiring, and if I become a teacher, I want to be like you. I hope all your dreams for administrating and education reform come true, because I know you could have a huge impact. You've already had a huge impact on me.

I am currently in the process of designing the Concord River Institute, which will offer a tuition-free experiential program much like Rivers and Revolutions to one hundred students between Fitchburg and Boston. At its core, however, the Institute will be a school for schools; teachers and administrators from around the country will be invited to observe, participate, and experiment with alternative instructional methods and models.

Our closing celebration for the fall semester of Rivers and Revolutions was held at deCordova Sculpture Park and Museum in Lincoln, Massachusetts. A huge crowd of family and friends gathered, and a number of our students spoke. One student, Nick, offered: "I have never liked school before...I hated it. I was made to feel stupid. I just couldn't see how what I was learning would impact me later in life.... After joining Rivers, I've never loved school more. It has changed me as a person." The next day, he was featured on the front page of our local newspaper. When I gave him a copy, he began to cry and said, "This is the first time in my life I have been in the paper for something other than football or the police log. My dad will be so proud."

Adam, age 16, former student

MICHAEL GOODWIN 83