Their involvement with the Coalition of Essential Schools has energized the daily lives of the two teachers profiled here and resulted in exciting gains for their students.

"Since I've moved to this school, my teaching has really changed. I used to feel as if I were the quarterback in the classroom. I carried the ball and made touchdowns with my best lectures. Somewhere along the line, I realized that I was doing all the work. Now I stand off to the side, and the kids do the running."

This is how Kathryn, a humanities teacher, describes the changes in her teaching since she became involved with the Coalition of Essential Schools four years ago. Like many other teachers in the Coalition, Kathryn is engaged, in this 22nd year of her teaching career, in the difficult process of analyzing her own practice, trying to describe what the changes mean for her and for her students.

Jennifer, a mathematics teacher, has been teaching for 18 years. She, too, is in the midst of a major transformation, but she uses a different metaphor: "I used to be the actor in my class. I stood front and center on stage. I made sure my props were in the right places before I began. Class used to go something like this: I'd ask the kids where they had problems with their homework. Then I'd work the problems for them at the board. Then I'd have them open their books to the next section, and I'd demonstrate the formula on the board. If they didn't have any questions, I'd give them a set of homework problems to work on by themselves for the rest of the period while I walked around the room providing help to those who needed it. I was so busy watching my own performance that I hardly noticed the kids! It took me a long time to figure out that it was the kids who needed to do the acting—not me!"

Changing Practice

Hundreds of teachers work in schools that belong to the Coalition of Essential Schools. Since it began in 1984 as a partnership between Brown University and a handful of member schools across the country, the Coalition has grown to include the Education Commission of the States, six states (Arkansas, Delaware, Illinois, New Mexico, Pennsylvania, and Rhode Island), and 150 individual schools. The statewide effort, titled Re:Learning, asks participants at all levels of the educational system to work collaboratively toward the common goal of powerful student learning.

Teachers, administrators, state-level policymakers, and the Coalition's central staff at Brown have joined together and have worked around the set of nine common principles (CPs) that direct our work in redesign.
organized around these principles will enable students to learn in more powerful ways while they are in school and will help them to participate more fully in our complex society upon their graduation. The principles are:

1. The school should focus on helping adolescents learn to use their minds well.
2. The school's goals should be simple: that each student master a limited number of essential skills and areas of knowledge.
3. The goals should apply to all students, while the means to these goals will vary as those students themselves vary.
4. Teaching and learning should be personalized to the maximum feasible extent. Efforts should be directed toward a goal that no teacher have direct responsibility for more than 80 students.
5. The governing practical metaphor of the school should be student-as-worker, rather than the more familiar metaphor of teacher-as-deliverer-of-instructional-services. Accordingly, a prominent pedagogy will be coaching.
6. The diploma should be awarded upon a successful final demonstration of mastery for graduation. This "exhibition" by the student of his or her grasp of the central skills and knowledge of the school's program may be jointly administered by the faculty and by higher authorities.
7. The tone of the school should explicitly and self-consciously stress values of unanxious expectation, of trust, and of decency. Incentives appropriate to the school's particular students and teachers should be emphasized, and parents should be treated as essential collaborators.
8. The principal and teachers should perceive themselves as generalists first, specialists second. Staff should expect multiple obligations and a sense of commitment to the entire school.
9. Ultimate administrative and budget targets should include, in addition to student loads of 80 or fewer pupils per teacher, substantial time for collective planning by teachers, competitive salaries for staff, and an ultimate per-pupil cost not to exceed that at traditional schools by more than 10 percent.

The nine CPs are deceptively simple. At first glance, many people may believe that they are already in place in classrooms across the country. But those of us working in partnership have come to understand that translating them into school practices requires radical change. Jennifer and Kathryn are 2 of 10 participants in a three-year study aimed at understanding the nature of the changes the nine CPs have inspired in their classrooms. These teachers are teaching very differently from the way they taught during the first 10 to 15 years of their careers. Each has interpreted the principles in ways appropriate to her own student population and school culture.

Last year I spent time in their classrooms and met with them periodically in an effort to understand what it means to become a coach or a director, to move from the center of the classroom to the sidelines. I'd like to share a brief snapshot from each of their classrooms.

Kathryn's Humanities Class

Kathryn teaches in an inner-city high school in the Northeast in one of the country's largest, most troubled cities. Her school houses some 400 students in grades 7 through 12. 40 percent African American, 40 percent Hispanic, and 20 percent other. During their first four years there, students study a common core curriculum and are double-age-blocked so that 7th and 8th grades are together, as are 9th and 10th graders. Students in these grades have three classes per day: humanities, science/math, and an advisory period. There are generally fewer than 25 students per class. Each student must complete a community service requirement and study a language. Languages are offered before and after school, as are several electives like music, physical education, and library skills.

Kathryn teaches two two-hour blocks of humanities daily and meets with her small advisory group for one hour a day. On Thursdays, Kathryn's students do their community service work, so the 9th and 10th grade humanities team members meet together for three and half hours to plan.

On a typical day, Kathryn's humanities class roars in after lunch. They unpack backpacks, throw their books on a table, hang up jackets. They poke each other and say hello before the bell rings. Then class begins.

Their work for the year has been focused around "What is justice?" They have worked with law firms, read Harper Lee's To Kill a Mockingbird, and studied the American judicial system.

After spending an hour on writing projects, students get a five-minute break, then return and break into four work groups. Each group moves easily to its particular working area. Kathryn hands around two actual court cases in which the judge determined bail. Each group gets one case. Kathryn directs them to select roles: one prosecuting attorney, one defense attorney, the accused, and the judge. The kids argue over who is going to do what.

"You can't be the judge; you've already been a criminal. No criminals ever get to be judges."

"I want to be the prosecuting attorney so that I can knock old Mike into jail for life." Mike punches the prosecuting hopeful in the arm.
“Okay, let’s get serious.”

Once they settle on their roles, they review the two cases and the circumstances that could influence the judge’s decision to post bail or not. The judge needs to determine whether or not bail might be paid and, if so, how much. Kathryn reminds the students that they must be able to explain their decisions and the processes used to arrive at them. Each group is then given 20 minutes to deliberate.

One group argues at length about the constitutionality of bail:

Prosecuting attorney: “I don’t think bail should be posted. This criminal is a repeat offender. He’s just going to go out and commit another robbery.”

Defending attorney: “What difference does it make whether the judge sets bail or not? This man is a poor man—otherwise he wouldn’t be robbing nothing! Where’s he gonna get the money? Bail serves the rich and defeats the poor. It’s just another example of how the legal system hurts poor people. Is that constitutional?”

Criminal (grinning): “I don’t think so. I’m never going to raise any bail money. I got starving kids at home.”

Judge: “Bail is set so criminals can come and go before they’re proven guilty—it’s innocent until proven guilty—so that’s constitutional. Get off it, starving kids. More like you got starving friends.”

Defense attorney: “Yeah, but, how can a poor person take advantage of that? And what does it look like for him? He has to hang out in the jail, instead of being able to go to his job and everything.”

Prosecuting attorney: “That’s what you get for stealing. You didn’t worry about other people’s rights.”

In each of the groups, students lean forward, arguing their points. Occasionally a burst of laughter or a loud groan is heard. The room is noisy; the students are engaged. Kathryn moves from group to group, sitting down for a few minutes to ask questions for clarification, and then moves on.

After 20 minutes, Kathryn asks each judge to announce his or her decision and to justify it. Each decision is different, with a different justification.

Kathryn then asks the kids to take out a handout she’s given them on the three points a judge must consider when posting bail. The class analyzes the judges’ decisions in light of these criteria. Kathryn’s only involvement is to indicate who has the floor next.

After a 20-minute discussion, Kathryn asks each of them to function as the judge for whatever case they hadn’t worked on earlier by writing down their decisions and then justifying their thinking. The room quiet the quickly as they set to writing for the remaining five minutes. Students hand in their papers, and, as they leave the classroom, each one reviews his or her plans for homework with Kathryn.

Jennifer’s Geometry Class

Jennifer is in her 18th year of teaching in a large comprehensive suburban school in the South. Riverdale High serves 1,100 10th-12th grade students, mostly white, with a 10 percent minority population, mostly African Americans. Jennifer and 7 other faculty members have designed and implemented the Opportunities to Learn (OTL) program. With the principal’s support, teams of 4 teachers take responsibility for approximately 80 students. There is a 10th grade and an 11th grade team. Students who elect to take the program take four subjects together.

Jennifer coordinates the OTL program and teaches four classes—two OTL math classes, one geometry and one algebra—and another algebra and geometry class in the regular high school. There are about 20 students in each OTL class, compared to more than 32 students in each of her regular classes. She has two periods for coordinating the OTL program, one to work with each of the OTL teams. Jennifer also does the scheduling and the liaison work between and among the principal, counselors, parents, and OTL students.

Seventeen 11th grade geometry students pile into the classroom. They each gravitate toward a particular table, where they settle in with their group of three to five students. Each group is designing a space or an area of its choice. Some groups are redesigning rooms in their homes. One group is designing a golf course while another group works on a weight room for the school. These projects require students to plan the space and create a visual representation of their work, to scale. They must include all of their computational work, including their budget computations, and produce a written description of their project, its benefits, and its compexities. Around the room hang big sheets of paper outlining each group’s initial plans for their work. The papers show the groups’ projections for what they would need to know and do for the project—figure area, volume, perimeter, work with fractions, decimals, percentages. They predict costs and display timelines.

On the second day of the project in class, Jennifer had given them a problem to work in their groups which accomplished two things. It refreshed their skills in figuring area, and it demonstrated for them what happens when they tried to build buildings of unusual shape. On the third day, the students brought in problems they were beginning to encounter. She had the industrial arts teacher come in to serve as a resource.

Today, Jennifer’s students are developing their interpretive skills working
with graphs by solving a problem from Swain's *The Language of Functions and Graphs*. Each group is given a set of statements and questions. For example:

1. Prices are now rising more slowly than at any time during the last five years.
2. How does the cost of a bag of potatoes depend on its weight?

Then the students receive a set of 15 graphs, for example:

![Graphs](image)

Their task is to match the statements to the graphs.

Jennifer hands out the sheets to the coaches at each table and gives each group instructions. "I want you to work in your teams to do this. But you must reach consensus on which graph belongs to which statement. When we're done, in about 20 minutes, I'd like you to defend your choices and write them on the board. The coach will appoint a spokesperson from each group. Y'all ready?"

The groups move right into the work. Jennifer circulates from group to group. Three boys at one table hunch over the sheets. The one wearing an ROTC uniform has a new and very neat crew cut. Another, with an earring and a long ponytail, has on a rocker T-shirt and jeans. The third is wearing an ROTC uniform has a new and very neat crew cut. Another, with an earring and a long ponytail, has on a rocker T-shirt and jeans. The third is wearing an ROTC uniform.

Jennifer says, "Okay, find the two most common answers for problem number one. Then I want volunteers to defend each of the answers."

The students engage in a rousing debate. Jennifer doesn't interfere, as they seem well able to monitor their discussion. After each answer is defended, she asks, "Do we have consensus? Which one is it?"

Then they go on to the next problem. When they fail to reach consensus, she asks students to add to the defense for each of the two answers until the circumstances become clearer for everyone. Toward the end of the period, she stops them and asks a few questions. "How does it make you feel when you can't find the right answer?"

"I hate it," a boy sighs. "It makes you feel uncertain." Jennifer grins. "Are there more right answers out there in the world than uncertainties?" The kids debate this while Jennifer helps them distinguish between fact, opinion, and hypotheses. When the bell rings, she reminds them they are to hand in reports tomorrow on their projects, detailing both progress made and complications encountered.

### Changing Roles: What's Different?

Kathryn believes that her primary focus has shifted. "As a coach, I am no longer standing in front of them teaching a lesson. I gather the material, provide the direction for our discussions. But the kids must carry the ball; they have to work the material, and as the discussion gets going, they are in charge."

Kathryn spends less time grading routine exercises, more time generating engaging materials, and far more time diagnosing individual student progress by watching, listening, and conferencing with students. "I focus on the questions the kids are asking, and I try to ask questions that will stimulate them. Actually, I feel we're more in search of questions—so that we can find particular areas of interest to the kids."

Jennifer's role has changed in different ways, but there are many similarities. She too has regular time during the day to work with colleagues. In addition, she sees fewer students, has more contact with parents, and concentrates on student engagement. "For instance, I try to present new math concepts in terms of their application. I start by giving the kids a real problem—say I want them to learn to do quadratic equations. I begin by posing a real-life problem where kids would need to solve for a square. I ask questions like, 'What do you need to be able to do this? Where else might you use this? Then I show them the formula by having students work the problem while I direct things from the side.'"

Jennifer's students spend far more time working collaboratively, which allows her time to watch them work. "Kids work problems in pairs or in teams. I ask them to reach consensus about the answers, and two things happen. First, I'm not the only teacher in the classroom anymore. Second, kids who get the concepts quickly reinforce their own understanding by teaching others. Oftentimes, kids can explain these things to other kids a whole lot better than I can. Then I spend my time trouble-shooting and figuring out how they are doing things and how to get them engaged—through problem solving and other activities. I know my students much better than I used to."

Jennifer and her students now find themselves using textbooks in new ways. "Before, getting through all the material in the book was the most
Jennifer and her class now “use the text as a resource to our work, rather than as the centerpiece.”

important thing to me. The pace of the class was so fast that I didn't take much time out to think about whether I was satisfied with the quality of what they knew. I've discovered that while they could plug figures into problems they were familiar with, they couldn't really think their way through different kinds of applications. Well, I want them to be able to think and to really use the stuff we're learning, and that takes more time."

"We've been discovering there is a lot of overlap in math texts. The other math teachers and I are talking about what should be taught in Algebra I, what should be left for Algebra II, and what skills the kids really need in order to do geometry. We're trying to find ways to slow down, to help the kids learn more thoroughly. When I do project work, and I have the kids working on real problems, we may cover three chapters at the same time. We use the text as a resource to our work, rather than as the centerpiece.”

Differences for Kids, Too

Students in both Jennifer and Kathryn's rooms seemed to be having a very different kind of classroom experience than the one I had in public school. There were some obvious visible differences. They worked at tables rather than desks, the rooms were lively, noisy places, and evidence of student learning—murals, timelines, photographs, and other final projects—adorned the walls. Then there were the more important if subtle differences which dealt with the quality of the intellectual life in the classroom. I watched the kids engage in serious discussions about emotionally laden issues like justice, equality, being right and being wrong, without taking the classroom apart. I observed them digging into projects, spending time working together to plan, to investigate, to revise work in which they were engaged. I watched these students treated with the utmost respect and realized that the teachers spent almost no time on classroom management details or on issues related to discipline. I watched Kathryn's students impress a group of attorneys from a prestigious downtown law firm as they engaged in a very sophisticated exchange about law and its interpretations. I watched Jennifer's geometry students come to class with blueprints for golf courses, her algebra students with road maps from Seattle to Fort Lauderdale, empty milk jugs, and paper airplanes as they planned trips to learn about time, rate, and distance.

Students in both these classes find their roles have changed just as much as the teachers’ have. Students at Kathryn's school tell me they must constantly prove how they know what they know. They can't let their work slip, because their classes are small and their teachers know each of them very well—they find it impossible to blend into the woodwork.

Jennifer's students believe they work harder in their OTL classes than in others. Every day, they demonstrate in front of other people what they're learning. In addition, they work with other kids, and so they have to get along. If they don't contribute, the other kids can badger them just as much as any teacher. Several of the students say that it's been a tough adjustment. They felt resentful at first because they thought their teachers expected them to be "geniuses or something!" These same students believe that they are actually getting more from school now because they have a better understanding of what they know.

Both groups of students like school better because they have to take more responsibility for their learning. "We decide what we're going to work on for our demonstrations. That way we work on things that interest us." For instance, when students in Kathryn's class were investigating "What is Justice?", they selected a variety of projects for exploration. Several located court cases of particular interest to them and researched the meaning of justice as it applied to these cases. Other students chose to explore the meaning of justice in several pieces of literature—in the poetry of Langston Hughes and in To Kill a Mockingbird.

Motivation to Change

Both of these teachers embarked on the journey to change their practices because they could see they were not having the effect on students they hoped. Both were motivated to try new things, and they were supported by their administrators and colleagues, who were also willing to test new waters.

Once they made the leap, however, they found themselves struggling with long-held beliefs and habits. Then it was

Students at Kathryn's school tell me that because their classes are small and their teachers know each of them very well, they find it impossible to blend into the woodwork.
Both teachers were motivated to try new things, and they were supported by their administrators and colleagues, who were also willing to test new waters.

toward more engaging teaching. “For 18 years, Kathryn said, “I almost knew the pages of the text by heart. Now there are a lot of things I don’t know. I don’t feel settled—because there’s so much to do. The first two years I focused on group work. Now I’m ready for coaching, individualization. I need to build my repertoire of individual coaching techniques.”

Jennifer noted that each year her school adds another Opportunities to Learn team and that eventually they hoped the whole school would join them. “All of this has turned me into a learner in my own classroom. I want to learn more about my students and about my own teaching. I guess I believe now that one teacher can make a difference, and I’m going to keep working that formula for making a difference.”

Both Jennifer and Kathryn provide us with beginning images of the changes teachers are making in their classrooms. The changes for both of these teachers are complicated and troublesome, and they affect the entire school system. Their schedules are different, their course loads are smaller, they work more closely with their colleagues and with parents. They are allocating resources differently, planning differently, testing student achievement differently. Both teachers feel more personally effective and believe that their students will be better able to participate with zest in our society. Jennifer and Kathryn claim that they are happy to move to the sidelines, or the wings, in order to watch their students move into the center of the learning enterprise.

The names of the study participants and their schools have been changed to respect their anonymity. Direct quotations from these teachers have been rearranged for clarity. Some of the participants, however, agree that the piece accurately reflects their work. For the complete cases, please see “A Formula for Making a Difference” and “Trusting Kids and Their Voices” by Wasley. For a more thorough analysis of our growing understandings about teacher change, please see “Stirring the Chaldust” also by Wasley. The nine Common Principles are derived from “A Study of High Schools,” by Theodore Sizer and colleagues. For a full description of the findings of that study, see Horace’s Compromise by Sizer: The Shopping Mall High School by Powell, Farrar, and Cohen, and The Last Little Citadel by Hampel.

The Citibank Coalition Faculty Project is funded by a generous three-year grant from Citibank, N.A.

References

Wasley, P. A. (Forthcoming) “Stirring the Chaldust: Three Teachers in the Midst of Change.” Teachers College Record.

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