Making Diversity Educational: Alternatives to Ability Grouping

How should we group students for instruction? Do we organize classes so that students who study together are as similar as possible? Or do we try to include in each classroom as wide a range of humanity as possible?

Educators can make strong arguments for both positions. On the one hand, it seems obvious that teachers can more easily tailor instruction to the skills of their students if the range of ability within their classrooms is fairly narrow. On the other hand, critics of homogeneous grouping—the practice of sorting students into classes or small groups on the basis of shared ability or achievement—argue that separate classes are inherently unequal: the instruction offered to students in “low” classes or groups is inferior to that offered to their more fortunate classmates.

The issue is complex, tangled as it is with definitions of teaching, with questions about the purposes of schooling, with fundamental beliefs about what schools can and cannot accomplish in an unequal society. It is, in addition, polarized, with advocates of homogeneous grouping concentrated in schools and critics clustered in universities and advocacy groups, their accusations and counter-accusations fueling a debate which generates little light.

Because this topic is so complex and so emotionally loaded, we have organized Making Diversity Educational differently from previous issues of Changing Minds. Instead of focusing entirely on the efforts of teachers and teacher educators to change what they do in schools and classrooms, we begin with a synthesis of educational research related to two sorts of grouping: the practice of separating children into “high,” “average,” and “low” groups, and that of educating students with educational handicaps outside of the regular classroom. We then describe the efforts of six groups of teachers to find alternatives to both sorts of homogeneous grouping.

“They Only Told Us the Positives” reports the mixed experiences of three second grade teachers who struggled with new approaches to the teaching of reading and new ways to group students for language arts. 46 Fifth Graders, A Four-Way Collaboration and “I Feel Like I’ve Been Mainstreamed” describe the efforts of teams of teachers and teacher educators working in Averill Elementary School in Lansing, in Holmes Middle School in Flint and in Holt High School, respectively, to provide academic instruction in “regular” classrooms to students with special needs. School Realities: Studying While Doing follows a team of Holt High School teachers and Michigan State University (MSU) faculty through a two-year examination of teaching and learning in homogeneously-grouped and heterogeneously-grouped social studies classes.
In Elementary and Middle School

Five years ago, Robert Slavin of Johns Hopkins University attempted to pull together the good research about the effects of ability grouping on the achievement of elementary schoolers. Slavin excluded three types of studies from his analysis: 1) all studies in which homogeneously grouped students were not carefully matched with a comparison group of similar children in heterogeneous classes; 2) all studies involving fewer than six teachers; and 3) all that looked only at one segment of the school population—the gifted, for example, or children with special needs.

Taken together, the studies that met his criteria did not support the practice of forming elementary classes on the basis of “overall ability” (which these schools and researchers measured with some mix of IQ and reading level). Indeed, children assigned to classes in this way learned no more on average—at least as far as one could tell from their scores on standardized achievement tests—than those who remained in heterogeneous classrooms. Slavin concluded that we have by now enough evidence to say that grouping elementary schoolers on the basis of overall ability does not, in itself, help them to learn.

Although relatively few elementary schools assign students to homerooms based on general academic ability, most do organize instruction in at least some academic subjects according to students’ achievement level in those subjects. Sometimes this means that students switch classes for a part of each day. For example, all the second graders in Maplewood School study math right after lunch; those who scored high on a test of computational skills at the beginning of the year go to Ms. Carnes’ room; those who scored low go to Mr. Ekborg’s room; the rest work with Ms. Oppenheim. Slavin found fewer good studies of this sort of regrouping, and was unable to draw conclusions from those he did find: one large study completed in the late 1950s showed students—especially high achievers—learning substantially more mathematics in classes grouped on the basis of math achievement; others showed no such pattern.

The vast majority of American children take their first steps towards literacy in small groups formed on the basis of their reading skills.

To begin with, teachers teach less new material to “low” groups than to “high” groups each day. They do this for good reason: the children in the low group have retained less of what they were taught yesterday and need more help with new words and new phonics principles. Teachers plan group instruction according to what they can see of average learning—or average ability—within a group.

This seems to make a lot of sense, but there is evidence that many children in low groups could learn more. Rebecca Barr of the National College of Education and Robert Dreeben of the University of Chicago conducted two studies of a total of 27 first-grade classrooms in a number of midwestern school districts. They found that although the teachers they studied assigned all children who scored high on word-learning tests in the fall to “high” groups, children who tested low ended up in all groups—high, medium, and low. When the researchers compared the learning of different students in May, they found that children of “low” tested ability who spent the school year in high reading groups learned about as much as their groupmates and much more than similar children who had spent the year in the low group.

Is this the result of labeling? In other words, do six-year-olds assigned to the low reading group conclude that they are dumb and lose heart for the struggle to become literate? To avoid discouraging youngsters in this way, some teachers go to considerable, usually fruitless, lengths to disguise the relative standing of the groups. Adam Gamoran of the University of Wisconsin has demonstrated, however, that group rank is not the culprit: other things being
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equal, if the low group in Ms. O'Reilly's class covers as much material as the average group in Mr. Obninski's room, students in the two groups will learn the same.1

Other things rarely are equal, however: the context of instruction usually differs dramatically for different groups within a classroom. To begin with, teachers teach their high and low groups differently. For example, when conducting oral reading with the high group, they rarely point out errors that do not alter meaning; according to one study, they are five times as likely to correct such mistakes when working with their poorest readers. They more often allow low group members to interrupt one another, so these pupils get fewer chances to figure out hard words independently and to correct their own mistakes. Low groups spend less time reading silently and more time reading aloud. Teachers ask their low groups more factual questions and fewer that require reasoning or thinking about the ideas in a story; they less often point to context clues to new words. They spend less time reading stories and more time teaching words in isolation.

Barr and Dreeben's analysis shows that while high ability students pick up a lot of phonics implicitly as they learn new sight words, students in low groups do not. In consequence, teachers may need to spend more time explicitly instructing slower students in sound/symbol correspondences and in strategies for analyzing unfamiliar words. However, all this focus on sound can further slow the pace of a faltering reader and draw a group's attention away from the story that might keep them interested in the book. Boredom is a real risk.

And so it is not surprising that students in high and low groups behave very differently. Sociologists Donna Eder and Diane Felmlee found that students in the low group of the first grade that they studied daydreamed or misbehaved about 40 percent of the time that other students were reading aloud. Those in the high groups focused on the book far more consistently.

Their observations of one child in this class help us see why children of low-ability learn more when they are assigned to average or high groups. Zach started the year in the "medium-low" group. As other children staggered through their reading turns, he imitated groupmates who were playing with bookmarks and otherwise amusing each other. He attended to the book little more than half the time he was not reading aloud. In November, the teacher promoted Zach to the "medium-high" group where both she and the other first graders reproved him for behavior that had passed unchallenged in the lower group. Like his new groupmates, he soon attended to the book and to the other readers more than 80 percent of the time.

Kindergarten and first-grade teachers usually assign their most fidgety and immature students to low groups. There they neither model on-task behavior nor require it of one another. In their company, children like Zach are unlikely to find reading instruction either compelling or productive.

These observations about "low" reading groups help us to see why the practice of grouping students by ability—or achievement—might put "high" and "low" students on diverging tracks where children who start out behind learn less each year than their more fortunate agemates.

We cannot point with certainty to a solution: Very few researchers have compared the effects of homogenous and heterogeneous groupings on children's reading achievement. However, both in schools and in universities, educators continue to seek alternatives to traditional reading groups. Most of the primary grade teachers who have moved away from "high," "medium," and "low" reading groups have been attracted to a "whole language" approach to literacy instruction that puts the child's own language and communication efforts at the center of literacy instruction, emphasizing listening, speaking, and writing (drawing and invented spelling) more than the decoding of written words.

These experiments, while often difficult, have proven exciting for many elementary teachers. But thousands of their colleagues who are troubled by research which identifies the weakness of ability grouping, nonetheless feel too overwhelmed by the magnitude of the changes they hear described at conferences to move away from ability groups or basal readers. In 1980-90, Jan Paul, Jan Lincoln, and Janice Briggs, who taught second grade at Elliott School in Holt, found themselves in a situation that mirrored that of their colleagues across Michigan (see "All We Heard Was the Positives"): they had heard a great deal about the...
Integrating Learners with Special Needs

The traditional first-grade teacher handles diversity in her classroom by creating reading groups. The school handles it by offering a variety of services to children who do not learn very well in the ordinary arrangements offered in the regular classroom. Some of these children have obvious organic impairments—they cannot see or hear, or have physical limitations that make it hard for them to speak or hold a pencil, for example—but most look normal to friends and neighbors and enter school without any identifying label.

During elementary school, an increasing number of these children find their way into special education. Some visit the resource room for a few hours a week; others spend most or all of each day there, joining former classmates only for lunch or physical education. The particular arrangements depend upon the child, the school, and the family.

The implementation, in the mid-1970s, of PL94-142, a federal law which required schools to provide appropriate educational services to all children and to do so in the least restrictive appropriate environment, coincided with a dramatic increase in the number of children classified as "learning disabled": between 1977 and 1983, while the overall special education population increased by 16 percent, the number of children labeled "learning disabled" rose by 119 percent.

merits of whole language and the problems with ability groups, but they did not see any alternative approach to teaching reading that looked do-able. In the spring of 1990, however, they discovered an approach that attracted them. In the months that followed they began to work toward a new reading program, one which permitted them to move away from ability groups without abandoning the basal reader that had been the foundation of their literacy instruction since they entered the teaching profession. Their adventures suggest both the difficulties and the rewards of moving gradually away from a program that groups children for instruction on the basis of their reading skill. The journey has not been easy, but these teachers have witnessed important growth in their students.

A six-year-old uses drawing and invented spelling to tell a story.
Although this did mean that more children with mild learning problems were getting some extra help with academics, many educators worried about the quality of the education being offered to these youngsters. The complaints leveled at classes serving children with mild educational handicaps echoed those being made about low reading groups and the low track classes in secondary schools: classmates offered students few models for good behavior or higher level thinking; the classroom culture discouraged effort; and teachers designed curriculum to manage behavior rather than to teach academic skills.

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And so, over the past ten years, as pressure has built to reexamine ability grouping, there has been a parallel development in special education. The Regular Education Initiative (REI), a policy statement issued in the fall of 1986 by the United States Assistant Secretary of the Office of Special Education and Rehabilitative Services (OSERS) Madeleine Will, has prompted many state education officers and local districts to reexamine the ways in which they serve children with disabilities. The REI was based on the work of an OSERS task force which had talked with parents, academics, and regular, special, and compensatory education teachers and administrators in an effort to judge the success of programs designed to help students with learning problems.

While celebrating the real accomplishments of PL94-142, then in its tenth year, the REI identified a number of problems with the "pull-out" programs which served most of the youngsters in public schools.

- Fragmentation denies services to students who do not fit particular categories. For example, to be classified as "learning disabled" in many districts, a child must have "normal intelligence." To be "mentally retarded" he must have an IQ below 75. These categories leave a number of "grey area" children struggling unsuccessfully with the demands of the regular classroom, but ineligible for special help. (See A Four-Way Collaboration.)

- The dual system results in lack of coordination and communication between regular and special education. Regular classroom teachers complained to the Task Force that when children leave the room for substantial periods of each day, they miss experiences that might knit them into the social fabric of the classroom as well as important parts of the academic program. And because the special education teacher rarely sees his students struggling with their "regular" assignments, he does not support their efforts as well as he might if he were in the regular classroom more.

- Separation stigmatizes those receiving services.

- Because placement decisions become a battleground between parents who want help for their children and school people bound by rigid rules, the home/school partnership is at risk even before the child enters the resource room.

To remedy these problems, Will recommended delivering special and compensatory education services "far more than is now common" in the regular classroom. Recognizing that the suggested changes would pose major problems for regular as well as special educators, she urged experimentation and various supports for teachers and principals working on new approaches.

In the last few years a number of teams of special and regular educators have grappled with the implications of the REI, creating new roles for all the teachers involved. 46 Fifth Graders, A Four Way Collaboration, and "I Feel Like I've Been Mainstreamed" describe the efforts of several such teams in Michigan at the elementary, middle school and high school levels respectively.

We do not yet have much research evidence on the effects of integrating regular and special education students, and if we did it might be hard to know what to make of it: the nature of the integration depends so much on the particular regular and special education teachers and students that we will probably need much more time before we can begin to speak authoritatively about "generalizable effects."

Barbara Keough of the University of California at Berkeley, after reviewing the reports of several recent experiments involving elementary and middle school students with mild to moderate special needs, reports that most of these show special education students succeeding socially in regular classrooms. She does not, however, find equally clear evidence that the children were learning academic subject matter more successfully: "In general, social/behavioral outcomes were positive (e.g., fewer referrals for special services, more positive perceptions by teachers, etc.), whereas the findings for academic gains were mixed."
In Secondary School

Many of the criticisms of tracking and other forms of curriculum stratification in high schools mirror those made of ability groups in first grade. But by high school students differ dramatically from one another in skills, interests, and ambitions, and high school teachers and administrators have to work long and hard to find alternatives that work instructionally and are acceptable to everyone interested in their school.

Research and rhetoric attacking tracking has created a groundswell of opinion against the practice.

A few years ago it was hard to find a large suburban or city high school that did not organize most academic instruction by ability. This situation has begun to change. Research and rhetoric attacking tracking has created a groundswell of opinion against the practice. Teachers, principals, legislators, and people in state departments of education have begun to ask whether tracking serves the interests either of students or of the larger society. School people have struggled to figure out what tracking accomplishes in their schools and what alternatives exist. What does the research really show about the effect of tracking on student learning and about the possibilities for organizing instruction differently?

What is Tracking?

In nearly all high schools, students' academic skills and ambitions influence the courses they take, but this influence operates in a wide variety of ways. A few schools place students in "tracks" that determine the level of challenge in all of their classes, so that, for example, everyone in advanced math is automatically scheduled for honors English. Others group by subject and leave much up to individual departments. Some stratify their offerings in all academic subjects, while a few do so only in math. Similarly, some urge young people who are bored or overwhelmed to switch classes, while others make such migrations nearly impossible. Perhaps most important, different actors—guidance counsellors, teachers, parents, and students themselves—make the decisions in different places.

Educators differ on which of these arrangements represent "tracking." Here we will use the term to refer to the practice of offering a particular course—junior English, for example—at more than one level of difficulty.

Does Tracking Influence Student Learning?

Tracking arose as a response to increased heterogeneity of the high school population and to the fact that adolescents are preparing themselves for a wide variety of post-secondary activities. Most researchers who analyzed secondary school grouping practices before 1950 found that sorting students on the basis of their ambitions, their academic skills, and their willingness to work improved achievement overall. However, many of these studies focused on the education of the "gifted" and suffered from a variety of methodological problems.

More recent studies and those using good research methods and focusing on more representative populations show no evidence that students in tracked schools learn more, on average, than those in which students with a history of school success study alongside students with fewer academic skills.

This finding is a little surprising: teachers say that it is easier to plan instruction when students are more alike, when, for example, they know that everyone enrolled in the class can read an eleventh grade textbook, and we would expect this ease of planning to translate into higher achievement test scores. However, a closer look at some of the better studies helps to make sense of the finding.

Three careful studies done recently in Israel, the United States, and Great Britain indicate that although tracking does not affect average achievement in a school, it does change the pattern of gains. Specifically, students who were assigned to (or choose for themselves, depending on school policies) the highest track learn measurably more than comparable students taking the standard courses in an untracked school. (This is the same pattern reported in the older studies of enriched classes for the gifted and talented.) So far, so good. However, students in the low track learn measurably less than their counterparts in an untracked school. Tracking, then, seems to increase existing inequalities, buying new opportunities for those who are already succeeding at school at the expense of those who are not.

In subjects such as English, influences outside of the control of the school—like family dinner table conversation and summer
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reading—make the effect of curriculum hard to measure. The effect of track placement is particularly dramatic in mathematics, where most students depend almost entirely on the school for access to knowledge. Adam Gamoran and Robert Mare of the University of Wisconsin examined data on 10,980 students who were sophomores in 1980. Even when they compared students who looked very much alike academically in tenth grade they found a substantial difference between the senior-year achievement of those who spent the next two years in high track and those who spent them in low track mathematics classes, a difference greater than that between the average sophomore and the average senior.

All students, whether or not they have done well in school thus far, seem to learn academic subject matter best when their classmates are academically successful and interested in school. But a study by Yehezkel Dar and Nura Resh of Hebrew University of achievement in a number of Israeli secondary schools—some tracked, some not—suggests that slower students need the stimulus of lively discussions and high expectations even more than their classmates do. Dar and Resh's analysis of test scores indicated that the higher a student's initial test scores, the less the average achievement of classmates influenced his or her learning.

Conversations with teachers and teenagers and observations of classes help us to make sense of the findings of survey research. When Jeannie Oakes asked teachers in twenty-five junior and senior high schools across the United States to list their goals for students in particular courses, she learned that most wanted students in their honors classes to work independently and to learn to think creatively and critically. They hoped that students in the low track would learn to get along with others and to conform to adult expectations. Students in high-track classes describe their teachers as spending more time on teaching and less on management and discipline than teachers in low-track classes. Observational studies show high-track students studying more interesting material in more varied and engaging ways: "highs" read books while "lows" complete worksheets.

In a more recent study of English and social studies instruction in 108 eighth- and ninth-grade classrooms, Gamoran and other colleagues from the University of Wisconsin found that teachers in high-track classes ask more "authentic" questions, ones which have no predetermined answers, "but instead call for student opinions or for information the student must uncover independently of the teacher." They also follow-up on student responses more often. Perhaps in consequence, their students are more often engaged.

All this makes it sound as though schools conspire against low-track students, but that isn't true. Teachers do not decide to work less hard on low-track classes or to give them more boring work. Teachers do not have all the power; in fact, teachers and students construct the learning environment together. It makes no difference what work a teacher assigns if only a few students do that work. Almost all high school teachers would agree with researchers that students in low-track classes are less engaged than those in high-track classes, but things get more complex when we begin to speculate about the reasons for that disengagement. Part of it is clearly selection: students who do assignments, pay attention in class, and, in general, find schoolwork compelling, are less likely to end up in low-track classes than students who dislike school. Placed together in one classroom, without the leaven of more enthusiastic and academically successful classmates, disengaged adolescents create a culture unfriendly to effort. Teachers respond with teaching that asks less of students, perhaps reinforcing the students' disengagement. Before long neither teacher nor students have much heart for academic work.

If we consider this profile of unmotivated students we can see why less-successful students need high-achieving classmates even more than Rhodes scholars do.

What Is To Be Done?

We can't be satisfied with a system that increases inequality by giving the most academically successful students good opportunities to learn while providing relatively poor ones for less successful contemporaries. The rich should not keep getting richer while the poor go hungry. What can schools and teachers do? Gamoran's analysis of data on eighth and ninth grade English classes suggests that it is possible for teachers to create low-track classes in which students learn as much as they would in an excellent untracked class. Of the 108 classes Gamoran and his colleague
Martin Nystrand studied, 90 were grouped by ability. The vast majority of the low track classes fit the general description provided by Oakes and by other descriptive studies: high-track classes read classic literature (Dickens and Thoreau, for example), wrote papers of a page or more several times a month, did more homework, and had more discussions and less seatwork, while low-track classes read teenage novels, wrote a paragraph every now and then, and did less homework and more seatwork.

Low track classes in 2 of the 18 schools were different. In these schools (1) the same teachers taught high- and low-track classes; (2) these teachers taught classic literature at all levels; (3) they spent class time in oral, not written, work; and (4) they expressed high expectations for both groups and worked very hard to achieve them. Students in these low-track classes gained as much as those in the high-track classes in the same school on the researchers' test of literature mastery. In both these schools, students in all tracks gained considerably more than would have been expected on the basis of their pretest scores.

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Although most of the schools Gamoran studied were public, both of those with exemplary low track classes were Catholic. Noting that within the past years two other researchers have also published reports on successful low-track classes in Catholic high schools, Gamoran concludes that tracking differs in different schools and that some low-track classes do provide successfully for students' academic growth, at least in Catholic schools. He observes that these classes have the following characteristics: high expectations; academic curriculum; oral interaction between teacher and students; great effort by teachers; no school practice of assigning weak teachers to low tracks. (As we ponder these observations we need to remember that Catholic schools, like other private schools, are not legally required to take every student who walks through their doors.)

Interestingly, both of these teachers of exemplary low track classes said that they preferred to teach untracked classes.

Alternatives to Tracking: Can We Get Rid of It?

A number of schools have tried to abolish tracking, but of course it isn't that simple. Just putting everyone together without making other changes in schools can create more problems than it solves (see "I Feel Like I've Been Mainstreamed"). Jeannie Oakes, whose 1985 book Keeping Track provided considerable ammunition to enemies of tracking, has tried to draw some lessons from her own informal observations of school reform efforts and from stories reported in research and in the media. She identifies these commonalities in schools that find workable alternatives to tracking:

- A recognition that certain common and fundamental beliefs support tracking and that it will be impossible to find an alternative that teachers, students, and parents can support without addressing and changing those beliefs. For example, most people believe that intelligence is global and fixed. Howard Gardner's work on multiple intelligences has encouraged a number of teachers to see intelligence as multifaceted and changing, allowing them to think differently about what might happen in a heterogeneous classroom.

- A reform agenda that includes many changes besides the abolition of homogeneous grouping. If schools simply mix everyone up and continue to teach as before, teachers get very frustrated. As we might expect, students who read at a sixth-grade level will not do well in a class in which everyone is expected to read Great Expectations at home and analyze it in a five-paragraph essay. Oakes finds that schools that de-track successfully also make changes in curriculum, in teaching strategies, in the ways they provide help for students with special needs, and in the ways they assess student learning. (See A Four-Way Collaboration.)

- Lots of inquiry and experimentation. When schools talk about changing the way they group students for instruction they tread on ground that is politically sensitive as well as pedagogically adventurous. The approach that works in one community may founder in another. Schools that make changes that work start by studying their own practice and initiate school and community-wide conversations about goals.

- Changes in the way adults in the school define their roles. In most school districts principals and school boards set new policies and expect teachers to implement them. According to Oakes, schools that find satisfactory alternatives to tracking break with this division of labor. They get teachers (and sometimes parents) involved in reading research and formulating theories and send principals out into classrooms to immerse themselves in the realities of heterogeneous grouping.
All these changes require enormous amounts of work and massive rethinking of teaching, learning, and human nature.

Such changes require other sorts of restructuring, so that teachers can have time during the school day to read and talk together. (See Changing Minds 2: Making Time to Make Change).

- Courageous leadership. Because tracking rests on deeply held assumptions, because it is tightly stitched into the fabric of most high schools, and because even well-conceived alternatives rarely slip smoothly into place, principals of schools that break successfully with the practice have to stand firmly on some uncomfortable spots and say impolitic things. For example, the principal of Martin Luther King Middle School in Boston last year told reporters for the Boston Globe, “I would like to be able to look every parent in the eye and say, ‘If you put your child in the Boston public schools, we will do everything we can to assure that your child has a successful academic experience.’ Right now, I couldn’t honestly do that.”

All these changes require enormous amounts of work and massive rethinking of teaching, learning, and human nature. All in all, the task is Herculean.

Engaging seriously with the research on tracking and trying to connect it with the teaching in a particular school can lead teachers and teacher educators into a complex examination of teaching and learning. This is what happened in Holt High School when Jerry Gillett and Pete Kressler, social studies teachers in Holt High School, teamed up with some faculty and graduate students at the Michigan State University College of Education to examine the effects of ability grouping in eleventh-grade American history classes (see School Realities: Studying While Doing). This social studies team has, over the past two years, become involved in studying teaching and learning in all the social studies classes Kressler and Gillette teach and in looking at a variety of ways to increase students’ involvement in their own learning.

Creating Inclusive Learning Communities

In the eighteenth and nineteenth centuries, the incidence of hereditary deafness rose as high as 25% in some sections of Martha’s Vineyard, a small island off the coast of Massachusetts. How did the population respond to a situation which might have taxed the capacity of a limited economy to provide special education? Everyone on the island became fluent in sign language.

This accommodation allowed the deaf full citizenship in the community—th ey married, raised children and worked alongside their hearing neighbors. But that was not all. Just as school children can learn from people different from themselves, hearing Islanders acquired from their deaf neighbors a language with its own strength and beauty. And although the last deaf Islander died in 1954, older members of the community who learned the language naturally as children still slip into sign in conversation with one another. They have a resource for expressing thoughts and feelings which is denied to their monolingual children.

The educators who are working to expand their learning communities to include everyone are not just talking about making schools more fair. They are creating schools which offer all students—rich and poor, able and disabled—new opportunities to teach and to learn. Some benefits of these efforts are carefully planned, but others are unexpected. Islanders who set out to communicate with neighbors found themselves in possession of a second language rich in expressive possibilities. Teenagers in Jean Tomlinson, Ann Kast, and Dan Plunkett’s class report that, as they have watched their teachers negotiate differences of inclination and opinion, they have discovered a wonderful model of serious collaboration. As Tomlinson says, “We hadn’t really thought of it that way, but…”

We can hope that in these more inclusive learning communities our students will, like those of Tomlinson, Kast, and Plunkett, find lessons in the way they are taught as well as in the academic substance of the curriculum. ■
tures and a few simple words on each page.

All three second-grade teachers have been frustrated by the difficulty of providing their students with chances to work on their own level. Like Paul, Briggs and Lincoln tried to meet regularly with small groups of poor readers, but this proved nearly impossible, because the daily round of work with the heterogeneous groups took all the time they had for language arts.

"We've spent a whole year hearing about how heterogeneous grouping helps, and how putting children together and not separating them is so beneficial," says Briggs. "But are we really meeting their needs when we put them all together? You know, there is a time when kids need to be instructed at their level."

Despite the frustrations, Jan Paul and her colleagues have found occasions for celebration over the course of the year. They saw students actively involved in learning and excited about reading—the second graders were bringing more books and printed materials to school than they had in the past—and they heard from parents that children were talking about school learning at home.

In addition, the progress of students like Peter, who started the year unable to read, pleases Paul greatly. She can't be sure, Paul says, that these youngsters might not have made good progress if she had taught them as she taught second graders in the past. "But based on experience, my personal feeling with my personal kids, I think my children have made very good progress. And I can base this on when my children read other things—other than what we are doing in reading—like we read the USA Today newspaper every week in my classroom. Those children do a beautiful job working with the paper. We are reading My Weekly Reader and the difficult words in there come very easily for most children in the room. So I think there have been some real positives from this. The negatives have been in the administration of it, and the frustration of making sure that we get to all kids."

"I've seen the same thing," agrees Briggs. "All the kids have made greater gains. They have made big gains."
have finally hit the trail.

Not everyone was packed and ready to go this morning, however. Last week Kelly assigned every fifth grader an occupation, a family, and an allotment of animals. She then handed them a list of possible provisions which noted the weight of each object, telling them to choose what they needed but to remember to keep their cargo under 2000 pounds. By Friday she had 46 lists, but 21 of them reflected little thought—one youngster, in order to complete the assignment quickly, had simply loaded his wagon with five 400 pound pianos.

Unwilling to let her students avoid the thinking that this assignment was meant to encourage, Kelly gave them until the end of Monday to select more sensible supplies. By this afternoon, 12 have satisfied her requirements and rejoined their groups. The remaining nine are scattered around three tables at the far end of the large classroom, still pondering their options.

A "farmer" discusses with Kolar, who is supervising the group, whether he needs to bring along a plow. "If you don't," Kolar warns, "the wooden one that you can make will wear out quickly."

"Couldn't I buy one?"

"You'd need to ask the blacksmith—and he would charge a lot of money." Kolar turns next to Daniel, who complains that even after eliminating a large number of items he is still 56 pounds over the 2000 pound limit. After helping Daniel to erase the changes that are muddying his calculations, Kolar explains the function of a bellows to a blacksmith, and suggests that he consider taking two, since otherwise he will be in difficulty when the first one wears out.

A few minutes later, as the school day ends, Kelly inspects newly completed lists. She congratulates Nicholas, who has learning disabilities, on his choices: "Last time you had too much, and not very good things, but now you have a better list." She checks for eating utensils but notes the absence of a water barrel.

As school buses bear students homeward, Kelly describes for her colleagues a dialogue that had helped Nicholas to reach this point: "It was great. At lunch time Nicholas was trying to eliminate some of the things he had chosen to bring on his wagon. He had picked tons and tons of stuff and he really didn't know what to eliminate. Peter Ladd [a high achiever] talked him through choosing two candles that [weighed two pounds] versus five candles that weighed one. It was really good because he didn't give him the answer, but he pointed these things out and helped him eliminate some things."

Learning to Collaborate

The path to this April afternoon has been dauntingly rocky. The teachers have pioneered a new sort of collaboration; they have learned new skills along the way.

Talking with the rest of the team earlier in the year, Renee Acker recalled that circumstances had forced her into a collaboration that frightened her. Although she had been somewhat excited, she had also been pessimistic about the project's survival. "I said it would last until maybe the end of September. I was scared that they [the special education students] wouldn't be accepted. I was afraid of hard feelings, not so much for myself, but for them. And also I was scared for me, because I have not had a lot of fifth-grade academics." In addition, "I didn't think I could stand up in front of 46 kids."

In September, Acker told Fran Barger that she often found herself feeling very protective of her former charges, "wanting to stick
Leonard drastically changed how I teach reading. "I've moved towards whole language." Working with Renee Acker has affected the way I work with kids, particularly students who are educationally at-risk.

In addition, the Project has changed the way he thinks about his teaching. "I used to see teaching as isolated skills, facts, etc. Now I think I have changed what I think is important for kids to know [in the area of math, for example] toward application, problem solving, and away from computation."

Most obviously, the Project has changed how he teaches. "In the past, if I was getting into a content area where I thought the [students with special needs] wouldn't get it, [it was] still pull-out, so they didn't come. This year is different." Since he can no longer choose to have the special education teacher keep her students in the resource room when he is teaching particularly difficult subject matter, he must solve these pedagogical problems "by changing either the method or the concepts taught." "Last year [I] did not feel special ed kids were my primary responsibility. This year all kids are my responsibility."

"We Need More Time to Talk"

Rene Leonard has, over the past 25 years, worked extensively with high achievers, and although she was fairly sure that the special education students could be integrated—"I didn't see why it couldn't be done"—she worried about whether she knew enough to teach particular skills to these low achievers. In December, as the group reflected together on their journey, she told Acker, "I would question my ability, if I were in your position, like taking your reading group. And I don't know if it would work. I knew it would work with you; there wouldn't be any problem."

The past two years have brought a major shift in the way Leonard teaches math. She chuckles as she tells a visitor, "For 24 years I taught math by the textbook. I loved teaching math because it was a chance to sit down while the kids did the problems—it was my only time for breathing." But in the summer of 1989, at a workshop with two MSU faculty members who teach math every day in a local elementary school, all this changed: "I just saw math in a completely different light." Now, she says, "I don't think any of them were understanding before, it didn't matter if they were bright or not."

She feels good about the new approach she began to take after this summer workshop and confident about integrating learners with special needs. "I want to take what works for higher level kids and offer it to all kids, because I think they are capable of doing it." She notes that in the four-week problem-solving unit that she taught earlier in the year, all but one of the special education kids succeeded and "it was challenging for the higher level, too."

She feels continually frustrated, however, by the way in which time constraints hinder the work of collaboration. In math, in particular, she feels they need to resolve issues of pedagogy and philosophy. "One teacher emphasizes computation, one emphasizes problem-solving. [We] need more time to talk about teaching techniques."

Helping Special Learners

Looking back in December, Ron Kolar said that integrating the students with special needs into the classroom and helping them to succeed academically has been easier than he expected. "I
“If some law came along and said, ‘You have to take those special ed kids out of this room,’ there would be a sense from every kid in here of ‘Why?’”

thought we would have to change a lot of things, not only academically and how we would do things, but the procedures, even with such things as lunch counts.” He has been pleasantly surprised.

In response, Acker noted that she has taken major responsibility for monitoring and ensuring the success of students she believes to be at-risk. “If I thought that something needed to be explained further or needed a little more detail, then I took the responsibility of giving them directions. If I thought that the special ed kids were going to have difficulty, then I took over the instruction. Or after they finished explaining it, I did it one more time, for the whole group, not to single them out, but to make sure that my kids—well, not my kids, but the special ed kids knew. And it would be easier because I knew them and I know the way that they function and I know the way that they work. And for some things, I knew that they just were not getting it.”

The Social Scene

“The biggest gains,” says Fran Barger, “have been in the social realm.”

Kolar agrees: “The big change that I see socially is that if some law came along and said, ‘You have to take those special ed kids out of this room,’ there would be a sense from every kid in here of ‘Why?’ Where at the beginning of the year it was almost, ‘Why are they here?’ Because that’s not the way it’s done. Now there certainly would be a sense of loss.”

The team describes important changes in particular students which seem to have grown out of the integration. Most of these changes have been in students with special needs, but Kolar has seen significant growth in a number of “regular” youngsters. He describes, for example, the change in Alexander. “Alexander has really benefitted from the special ed kids being in here,” says Kolar. “I’m not sure why. Except that it’s more seeing them as people, their challenges. He was a loner, he would cry at the beginning of the year. I don’t see that any more. He’s so much more confident. I think he had behaviors that made him kind of an outcast, too. I think he has grown along with them. Maybe, because he wasn’t the only one who would cry, it sort of gave him a chance to change. I’m not sure why, but I have seen a drastic change, and I just don’t think it would have happened without the inclusion.”

A Four-Way Collaboration

In the fall of 1989, Pam Nagy, seventh-grade English teacher at Holmes Middle School in Flint, and Patti Wagner, a special education teacher at Holmes, teamed up with Mark Conley and Linda Patriarca of Michigan State University to find ways to integrate special and regular education students in language arts and to improve the teaching of reading, writing, speaking, and listening.

In the work they have done together over the past two years, Nagy reports, she, Wagner, Conley and Patriarca have focused on two goals: they have experimented with the language arts curriculum and they have looked for teaching strategies that would make language accessible to all children. “That was the bottom line: will it work for Patti’s kids?”

Integrating students with learning disabilities into the seventh-grade English class provides a crucial impetus for focusing on understanding, says Patriarca, a professor of special education.

I am shocked by how little attention is usually paid to whether students understand content. Content coverage is often equated with teaching. When special ed kids come in you have the opportunity to think again about accessibility: Do all students in the class have the background to understand this? Are we asking them the right questions, giving them a chance to predict, to generate hypotheses, and so on?
When teachers begin to ask these sorts of questions, to continually evaluate students’ understanding, regular education students benefit as much as those with learning disabilities. “These issues come up because of our foursome, so we think about them more. But the goal isn’t just to reach the special ed students—we want to reach them all.”

Getting Started

Conley describes the first year of the collaboration as a time in which he and Patriarca got to know the children, and the four collaborators established trust necessary for joint work, formulated problems to work on, and experimented.

They moved beyond standard approaches to reading—assigning a story from the literature anthology and a set of comprehension questions. Says Nagy, “We worked to find different ways to involve [the children] in the reading process and different ways of creating understanding for them and helping them to create their own understanding.” Nagy reports that Conley introduced her to the use of prediction guides and that her students really enjoyed working together in small groups, trying to figure out what would happen next in a story.

Conley also talked to the teachers about looking for themes in stories, Nagy recalls. “We didn’t even know about themes in literature. I guess if I had been a secondary English teacher I might have learned a lot more, but I’m not. I’m an elementary teacher, so I didn’t get that kind of classes when I was in college.”

In order to engage students with the theme of the story, “We would have five or six statements that were,” Nagy pauses, “kind of inflammatory in a way, and the kids would have to react to these statements from their own experience. So we started to build background knowledge and to help them to reach into their own personal life experiences. So that when they began to read this little story, they would have a better way of relating to what was happening.”

“If they can’t read it, or they struggle with it, they get more caught up in struggling with the words than with the message. So we began to do much more reading aloud.”

In addition, the teachers read many stories out loud—something that Nagy would never have done in the past for a story that she wanted her students to answer questions about. “If they can’t read it, or they struggle with it, they get more caught up in struggling with the words than with the message. So we began to do much more reading aloud. And we discovered that if we did that there was much more meaning. First of all, because we read with expression and they don’t yet.”

As they read aloud, the teachers stopped and asked the children to make predictions about what would happen next, given what they had already read, students had to justify their predictions with evidence from the story. “They really enjoyed the fact that their predictions came true.” They thought about particular words and how the author’s word choices related to what they knew about a particular character.

The children also wrote, produced, and filmed plays. And they corresponded with second graders in a Lansing elementary school, writing stories for them at Halloween and Christmas. “And the Lansing kids wrote back,” Nagy recalls. “I really wish we had filmed our children reading the responses from those little guys—the looks on our children’s faces. It was just awesome.”

“It was sort of a hodgepodge [that first year]. I guess if a parent had ever asked me what his child had learned, I would have said, ‘Well, he’s learned to express himself. He has learned to think about an answer and not just put down the first thing that comes into his head. He has learned to relate many of the things we have read about to his own experiences, his own life. He really hasn’t learned to diagram sentences or put in capital letters and periods, and so forth. We haven’t done a whole lot of writing about certain things, but we have done a lot of reading and your child can express himself and be thoughtful and give evidence.’

Emboldened by an overwhelmingly positive response from the students—“In interviews last year they expressed that they really liked to come to this language arts class”—the team decided during their summer meetings to work intensively on writing the following year. This was a major step for Nagy. “I never felt comfortable teaching writing. I never had a course on how to write or how to teach writing. So what I did was always off the cuff, or ideas I would pick up from a magazine or an inservice. So this has been as much a learning experience for me as it has been for the kids. I still don’t fully understand the writing process, but I’m much more comfortable with it now than I ever was before and also I’m much more determined to do a better job at it.”

At Patti Wagner’s recommendation, the team read Nancie
Conley established a connection between the Flint seventh graders and Troy Sullivan, a friend of his who lived in Alaska.

Despite a major setback—because an unusually large number of students who had been retained in the seventh grade were assigned to the team, they opened the year with 45 students in their class—they moved into high gear in the fall.

In order to bridge the cultural distance between the students and some of the stories in their outdated anthology, Conley established a connection between the Flint seventh graders and Troy Sullivan, a friend of his who lived in Alaska. The Holmes students sent Sullivan a list of questions about Alaska; he responded by making a two-hour videotape which actually showed them the answers to many of their questions. In answer, for example, to "Are there supermarkets in Alaska?" he and his wife filmed their own trip to the local shopping plaza.

"This paid off big time," recalls Conley. "Not only did they feel like they knew someone, but they gained a lot of knowledge." When the class began to read "Showdown on the Tundra," a story which had meant little to the previous year's seventh graders, "what was neat was that they were reading the pictures and making some sense of them. There was this wolf alone in the picture, and we knew that wolves travel in packs..."

Tragically, Sullivan was killed in an accident a few weeks after he sent off the tape. Many of the students wrote letters of condolence to his widow, to whom they also felt connected through the tape.

Atwell's In the Middle, a book which describes the author's language arts work with seventh and eighth graders in a New England middle school. And, meeting on their own time, they designed units to carry them through the first ten weeks of school.
Poetry and Commercials

In mid-March, 1991, Conley, Nagy, Patriarca, and Wagner announce to their third-hour class that a journalist will visit the class the following Tuesday. They invite the seventh graders to think about what they have been doing, and how they want to present their work to someone who takes writing as seriously as they do. Excited by the prospect of an audience, the class decides to show two videotapes they have recently made, one of the mock commercials they have been writing, and one of a poetry reading.

The following Tuesday at 9:30, the 27 seventh graders introduce themselves to the visitor. “Don’t laugh when you see ours,” a girl warns the outsider with a grin, “we kind of messed up.” The introductions completed, Patriarca loads the cassette recorder and the children chatter excitedly until she calls out, “Excuse me, we can’t hear.” The children shush each other immediately, and focus on the screen which now shows a thirteen-year-old girl weeping histrionically while the voice of a classmate in tones, “Are you sad? Are you lonely?” Sunshine breaks through the clouds as she accepts a piece of candy: “Oh, a B. J. Bar!”, but the performance breaks down as she fumbles unsuccessfully with the wrapper.

The seventh graders lean eagerly forward as a second group presses the delights of “Jordan Boots” and the first group redoes the candy bar commercial. This time the wrapper comes off without a hitch, and, as the once desolate teenager bites into the candy, the screen explodes with song and dance.

After watching the rest of their “commercials” and answering the visitor’s questions about their work (“What was hard?” “Getting everyone to agree on what to do”), the class watches a second video, one in which students read poems they have written then field questions from their classmates. Although the poems vary predictably — several are funny, one explores what it is like to be a teenager, and love and loneliness make the expected appearances — taken together, they remind the viewer forcibly of the hard facts of these students’ lives. Two poets address brothers who have died violently; one writes eloquently of a lonely experience: “I was the only black girl there.”

“There is No Stigma Attached to this Classroom”

Who are the children who are classified as “special ed”? How different are they from schoolmates in the regular classroom, and how much does the curriculum have to change if they are to be included? The answers to these questions depend heavily on local policies.

In spite of a perception among students that there is something quite wrong with anyone who is in special education, Nagy reports that Wagner’s seventh graders have integrated easily with hers — so easily that some of regular education students do not even know which of their classmates have learning disabilities.

Partly this has happened because of the criteria for special education placement. In order to be classified as “learning disabled,” a child in Flint must have average intelligence. Thus, Nagy reports, “Patti Wagner’s kids fall within the range of my kids. They have average intelligence, but some language disability.” Indeed, she continues, she teaches many “grey area” children who do not qualify for special education services because their IQs are too low for them to be classified as learning disabled and too high for them to be mentally retarded.

But even though the students with learning disabilities are no less intelligent than their peers, they feel the stigma of their placement. Says Nagy, “Patti’s kids know they are labeled. That’s why they like to come into this class: because it’s a regular class, and there is no stigma attached to this classroom.”

“Patti’s kids know they are labeled. That’s why they like to come into this class: because it’s a regular class, and there is no stigma attached to this classroom.”

Collaboration Carried to the Fourth Power

As these four educators experiment with the English curriculum, they also attempt to bridge the chasms that separate school from university and regular education from special education. Nagy brought with her to the Holmes Professional Development School strong feelings about university researchers who “come into schools, do research, and leave without impacting your practice.” “I have really resented that. And it didn’t help when I heard someone say, ‘Imagine all the dissertations that can be mined in this setting.’ ”

Fortunately, Conley and Patriarca assured her that their primary purpose in coming to Holmes was to improve students’ learning and that they would do no research during their first year.
there. In addition, Nagy found
them sensitive to the feelings that
she and Wagner brought to the
collaboration. "We felt that they
obviously 'knew more.' And we
didn’t realize that they had as much
to learn from us as we did from
them."

But learning to view the collab-
oration differently, though it
eased some difficulties, created
others. "I thought it would be like
graduate classes: They would just
tell us what to do, and I would do it,
and I would feel real successful.
Right? Wrong. I do feel success-
ful, but they have been learning
along with us.

"It was hard to make the
changes, not to have something
stable to substitute for [what we
had been doing]. I'm a very spe-
cific, concrete person. I like to
have everything laid out. And it
wasn't. I've had to learn to live
with that. I'm not always easy
with it, but I'm a lot easier with it
now than I was before."

As Linda Patriarca points out,
there are differences in perspec-
tive built into the school/univer-
sity collaboration. Sometimes
Nagy looks around during a class
and sees chaos, while Patriarca
sees a few youngsters who are
more engaged than they have been
in the past and a trio who are
arguing about their writing. These
different perceptions reflect dif-
culties in institutional norms and
priorities: teachers are judged by
whether their classes are under
control, while professors are not;
the teacher's view is moment-to-
moment, while professors can af-
ford to take the long view. "If I
became a teacher for a year,"
Patriarca asserts, "I'd see the same
issues that Pam does. It is a matter
of role."

Collaborations between spe-
cial and regular education teach-
ers face somewhat different snags.
To begin with, a team structure
can strip special education teach-
ers of important professional
rewards. Most give up their class-
rooms and some also feel that in
the bustle of the larger "regular"
class they lose touch with their
students. And, because they are
not certified as subject matter spe-
cialists, they do not always feel
like full-fledged members of the
new team. Indeed, the policies of
some school systems require them
to work only with students who
have special needs. As Nagy points
out, such policies undermine the
potential benefits of integration:
"What does that do to those kids?
Why don't you just put a neon
sign on them? And Patti has spe-
cial training that can be useful to
lots of kids."

Wagner and Nagy have inte-
grated only one of the five classes
that each teaches every day. But
Wagner has altered the curricu-
um of her self-contained class
too. "And," says Nagy, "She is
more successful there than we are
here." Nagy believes that this is
partly because Wagner under-
stands the writing process better
than she does, but class size and
curricular flexibility also play a
critical role. While "regular"
classes can, by contract, enroll up
to 37 students, special education
classes rarely go over 10. Also,
because special education students
are exempt from the system-wide
tests that other seventh graders
have to pass in order to move up
to the next grade, their teachers
have considerable latitude in de-
signing lessons.

But the students love the mul-
tiplicity of teachers—"You don't
have to fight for attention"—and
Conley, Nagy, Patriarca, and
Wagner manage to learn from their
differences. "This diversity of view
promotes rich reflection," offers
Patriarca. "If everyone agrees,
there's no reason to talk."
"I Feel Like I’ve Been Mainstreamed:"
A High School Teacher’s Journey

In the fall of 1989, like many of their colleagues at Holt High School, Jeanne Tomlinson and Larry Burgess began to experiment with cooperative learning in the Fundamental Skills biology class that they had taught together for five years. The group work wasn’t very lively and Tomlinson and Burgess thought they knew why: most of the 17 students in the class were in special education, and none of them had a history of academic success.

As Christmas vacation approached, Tomlinson and Burgess made a dramatic decision: instead of continuing the class into the second semester as they had in previous years, they would disolve it and integrate the students into Burgess’s other biology classes.

The results were discouraging: “Grade-wise, the kids bombed,” says Tomlinson. “There were times when we would look at each other and say, ‘Why are we doing this?’ ” Some of the worst news came from interviews Tomlinson conducted individually with the special education students near the end of the year. “You don’t know how stupid I feel!” one girl confided. Many said they were afraid to talk or ask questions, that the regular education students were “faster” and that they were not tolerant of the special education students’ “slowness.” But perhaps most painful of all, some students said they felt isolated and out of place without the friends they had taken classes with since elementary school. “I’ve never seen these kids before in my life,” said one, “never talked to them.”

The special education students liked group work no better than full-class presentations. They reported that other students had not taken their ideas seriously, that they had felt stupid, unsure, and anxious with the new classmates. A boy with learning disabilities recalled serving as the recorder for his group, getting behind, spelling words wrong—“It was horrible.” Another said despairingly, “I took this class and I’ll fail it. I’ll take it again next year and I’ll probably fail it again. I guess I’m just brain damaged.”

Even though Burgess was not fully convinced of the validity of the data—“We pulled kids out of class for 20 minutes in May; their answers reflect what was happening that day, maybe that week”—both he and Tomlinson were much troubled. Instead of giving up, however, they presented their findings to others in the high school who were thinking about mainstreaming and also to special educators from other parts of the Holt school system. They also resolved to try their experiment again and looked closely at the interviews and their practice for ideas about ways to improve the success of learning disabled students. Alongside their interview results they listed their ideas for improving the success of learning disabled students. These included:

- “Thinkbooks” to help instructors see immediately how students are understanding material and also to allow students to ask questions without appearing “dumb.”
- Holding students to a higher standard during the first semester so that they are used to working hard and to taking essay rather than short-answer tests.
- Changing instruction in the mainstreamed classes in ways that responded to students’ com-
plaints—making connections between lessons, checking the pace frequently, writing more on the board or overhead and depending less on verbal communication, and using more visual aids and graphic representations.

- Scheduling private follow-up conversations after tests and allowing students to raise their scores by demonstrating understanding of topics they had missed.

Instead of waiting until the end of the year to assess students’ experiences, Burgess and Tomlinson resolved to interview everyone who had been in the Fundamentals class three times during the spring term.

The Second Time Around

One Friday morning a few weeks into the 1990 spring term, Tomlinson asks 15 year old Nathan to join her and a visitor from Michigan State University in the small office that adjoins Burgess’s biology classroom. She began interviewing a few days earlier and so far she is pleased. “There seem to be more kids this year more socially involved with kids. I interviewed several kids yesterday who said, ‘It’s fine, there’s nothing wrong. I like it.’ I don’t think I got any of that last year.”

Nathan describes some of the differences between this class and the Fundamentals class he and his friends took in the fall. “This class is a lot more thinking, a lot more labs, more bookwork…” “Last semester we used the book for information, but not this way…” “This class is bigger…” “Our class was a lot more talkative…” “Mr. Burgess gives more lectures [in this class]. Like before a lab he’ll talk ten to fifteen minutes before we do it. Last time it was more like five minutes.” The lectures don’t always help Nathan: “I learn better when I am active.”

Without giving any signs of embarrassment, Nathan describes what’s hard about the class: There are “strange new kids. They don’t know you, and they look at you as though you’re dumb. You wonder if they know all the answers and you don’t know what’s going on.”

Like Tomlinson and Burgess, Nathan looks the pain and difficulty in the eye. But he also sees some value in the new class. “We do more groupwork,” he tells Tomlinson, “and that really helps me a lot. We have different people for groups, instead of just having the same people all year.” Overall, the class is harder “because there’s a lot more thinking involved, and there’s more work.”

After Nathan returns to class, Tomlinson comments that “it was interesting that Nathan was able to articulate that so well: ‘I learn better when I’m active.’” In some ways, she observes, because Burgess doesn’t feel the same pressure to cover the material, the curriculum of the Fundamentals class reflects new ideas about the teaching of science better than the regular biology class does. “In the Fundamentals class, Larry was willing to spend more time on one thing. I’ve noticed that some regular education teachers have a really difficult time feeling okay about spending more time on one subject at the expense of something else.”

In the PDS science group, Tomlinson adds, they are working on a conceptual change model of teaching, focusing on clearing up misconceptions, “really taking on the less-is-more philosophy.” “And at one point Larry said to me, ‘You know, what it is, it’s the Fundamentals class.’ For example, when the Fundamentals class studied cells they built a factory, because, Tomlinson explains, the structure of a factory parallels that of a cell. “The factory has walls, the cell has cell walls; the nucleus is kind of like the boss’s office.” The regular biology class rarely takes this sort of detour.

The Block Class

As Tomlinson describes the frustrations that she and Burgess encounter as they try to restructure existing biology classes to improve the learning of special education students, she often alludes to the different role she plays in another class, one conceived and created from whole cloth in 1990 especially to respond to the needs of “students at risk.” The “Block Class,” as it is called in Holt High School, involves 54 tenth graders, four of whom are eligible for special education services, two regular education teachers, and Tomlinson. It meets for two consecutive periods (a block) every day. Dan Plunkett, a history teacher, and Ann Kast, an English teacher, have designed a curriculum that integrates American his-
One Thursday Morning

On a grey Thursday morning in early March, 52 tenth graders settle into their seats and Ann Kast launches into an energetic introduction to a unit on Thornton Wilder’s *Our Town*. Today, she explains, they will watch the movie. Over the course of the next two weeks they will read the play and prepare to enact it. There will be plenty of parts, since each act will have a different cast, but no one needs to act who doesn’t want to. Since they will also need a costume director and set designer for each act. An audible gasp of wonder greets her announce that some people will do lights.

“Is there going to be an audience?” a girl near the back of the large room asks.

“Us,” replies Kast succinctly, adding that they can invite other classes if they wish, but that the multiple casts may make the performance a bit confusing to outsiders.

Kast then turns to the play itself, saying a few words about setting, themes, and structure, clarifying the difference between the stage manager (a character in the play) and the stage director (a tenth grader responsible for aspects of their production), and directing students to do three things as they watch: “Think about the theme; think about what part you want; and think about the action—you will be responsible for knowing that.”

The film begins, and students settle into the usual variety of postures and watch with concentrated attention which would surely please Thornton Wilder—although, as he had surely intended, several stretch and yawn as Professor Willett interrupts the human action to present facts on the geology of southern New Hampshire.

Studying World War I

The class has just finished a unit on World War I for which they read a variety of short pieces, some of them fictionalized, describing aspects of the conflict—including “Assassins Story” and “The Secret Treaties,” an article dealing with the Franco-Prussian War—and watched *All Quiet on the Western Front*. In groups, the students created projects integrating what they had learned, and Plunkett describes one with a delighted glint in his eye. Three students fashioned a battle field out of dirt, plywood, and model soldiers. Preparing to create a video of a battle for their class presentation, they drilled holes for firecrackers and persuaded one mother to buy them some smoke bombs. They invited Plunkett to come by the garage to see their hardiwork—before they blew it up in the video. “They did a terrific job. There is so much going on in a project like this, that it is hard to evaluate.”

Plunkett tells wonderful stories about the learning community that has evolved over the past six months. One father commented to Plunkett that he had been listening in on a group as they worked on a project at his house one Saturday afternoon. He had been impressed by their involvement, and by the way in which they worked together.
"You have 52 teenagers, and they're all reading. They are all doing what they are supposed to. It blows my mind. It just blows my mind."

Plunkett asked him if he knew that one girl in the group had special needs. The parent evinced astonishment. "I would never have known if you hadn't told me."

Warming to his subject, Plunkett tells the visitor about another girl with special needs in the class who was worrying, along with her classmates, about what courses to take the following year. "Go ahead and take the regular ed course," urged one of her group mates, "and I'll help you."

Plunkett describes a student who has blossomed, completely changing the way she dresses and the way she presents herself, noting later that he has seen a comparable growth in self confidence in all kids. "All of them were leery of doing something in front of the class in September. The groups have built self confidence."

As he and his colleagues made plans for the class, Plunkett reports, he worried a bit about managing so many students. The problems he imagined have not materialized. "The large group seems to have its own control mechanism that keeps Johnny Joker from acting like Johnny Joker. I think it's because there's bound to be someone they want to impress."

He reports on his students' purposefulness with wonder, "In this class you see the interaction in groups that's needed to get the job done. You have 52 teenagers, and they're all reading. They are all doing what they are supposed to. It blows my mind. It just blows my mind."

The papers emerging from the World War I unit illustrate vividly the range of academic skill in the class, and also the range of opportunities for success and meaning-making. One blue folder holds a simple hand-written letter from a soldier in the trenches—a boy only a few years older than its real author—to his mother in the United States. The letter describes the different countries involved in the conflict. It concludes, "I don't know why the United States got into this. I could be having fun with my friends instead of watching my friends die." Below it in the stack, a neatly typed four-page paper entitled "A War to End All Wars" provides a detailed chronology of the events and alliances leading up to the war.

"How do you grade these papers?" the visitor asks Plunkett.

"I look at what they knew at the beginning of the unit, what they know now, and what they have written. What I've always hated about tests—students say, 'Why don't they ask me what I do know?' So we say to kids, 'Show us what you know.'"

A Shift in Role

The changes that Tomlinson, Burgess, Plunkett, and Kast have made in order to draw students with special needs back into the mainstream of Holt High school go miles beyond simple schedule changes and the provision of instructional support within the regular classroom. These four teachers are trying to create a different kind of learning community and new routes to learning.

For Tomlinson this has come as part of a major shift in the way she thinks about her role. In the block class she serves as a learning consultant for teachers and for students. Partly in order to avoid singling out those with learning disabilities, she tries to model academic skills for everyone. When Plunkett or Kast are lecturing, for example, she may take notes on the overhead projector, and tell the class that they can check their own note-taking against hers if they want. After students read the seven articles on World War I, Tomlinson suggested that they make a schematic map showing interrelationships among the readings. Explaining that ideas of this sort grow out of her training and her experience working with students who have learning disabilities, Tomlinson notes that her suggestions have sometimes dismayed her colleagues. "At first I think that Dan thought it was childish and unnecessary, but now I think he sees it is helping."

"Another thing I do a lot of in here is I plop down in a desk and I become a student and I ask questions that I know the special ed kids have in their heads and I think probably other kids do, too."

The English and history teachers had to change the way they teach and have also had to learn to team. Inevitably, this has meant learning to deal with some disagreements—a difficult adjustment for teachers who mostly worked independently in the past. "Whenever Dan and Ann and I would have a disagreement," says Tomlinson, "Ann would go home

"I ask questions that I know the special ed kids have in their heads and I think probably other kids do, too."
“It’s so wonderful to walk down the hall and not just talk to the special ed kids.”

with a headache and I would say ‘You know, it’s just part of the process,’” an insight that has grown out of many years of teaming.

But even when the team work is hard, and she and her colleagues disagree about how to teach, Tomlinson sees a rich educational payoff in the collaboration: “We’ve found that as a team we are just a wonderful example for kids to watch, because we have to learn to work cooperatively with each other, too. And some of the students have articulated that to us, that they think that this is a wonderful example. We hadn’t really thought of it that way, but...”

Tomlinson sees parallels between the changes in her own professional life and the changes she is asking her students to make. It has, she says with a smile, been inclusion for her as well as her students. Before last year, all her team teaching had been in fundamentals classes, working with students who had poor academic skills. Since beginning to teach in regular classrooms, she has struggled with her role, trying to figure out how she could be helpful to teachers and all students, given her lack of expertise in specific subject matter. “I can really understand and empathize with where [the special ed students] are coming from.”

It is evident, however, that she enjoys the process. “It’s so wonderful to walk down the hall and not just talk to the special ed kids... If we could only just take my special ed label away I’d be all set.”

With undisguised delight she tells of one student in the block class who, although still eligible for services, had moved out of special education before coming to the high school this year. When the girl dropped in on her junior high teacher, she reported that although she was doing well in her other subjects, she was struggling in math. The ninth-grade teacher suggested that the young woman consult with Tomlinson, noting, “She’s in special ed, you know.”

“Oh, no,” the student corrected her, “Ms. Tomlinson can’t be special ed: she’s too cool.”

School Realities: Studying While Doing

By Michelle B. Parker

After a presentation describing research on tracking at the 1989 Summer Institute, I overheard Jerry Gillett and Peter Kressler, two social studies teachers from Holt High School, ask each other provocative questions:

1. In what ways are the conclusions of researchers like Oakes [in Keeping Track, 1986] and Powell [in The Shopping Mall High School, 1985] about grouping students by ability true for students at Holt High School?

2. Do we as teachers have lower expectations for lower achieving students?

3. In what ways is the self-esteem of students at all levels affected?

4. Are only certain kids learning certain things?

These questions get at the heart of some moral and ethical issues. With no easy answers, they invited conversation, and I asked if I could join it. The discussions that ensued spawned an inquiry which continues to this day. Since June, 1989, additional people from Michigan State University and Holt High School have joined the team, altering and broadening our inquiry.1 We focus on Peter Kressler’s American history

1A two-week long workshop sponsored by the Michigan Educational Extension Service involving faculty from the Michigan State University College of Education, and from the six professional development schools then associated with the College, and representatives of various partner organizations across Michigan.

2The following people have been members of the Social Studies Team since its beginnings in 1989: Tom Bird, Jerry Gillett, Peter Kressler, Michelle Parker, and Trudy Sykes.
Because we wanted to find out what students were learning, we realized that we needed to be in classrooms looking, listening, and talking with students.

courses and Jerry Gillett's courses in government, psychology, and applied economics. The social studies department at Holt offers American history courses at three levels of difficulty, and Pete teaches all of them: general, honors/advanced placement, and fundamental skills, a section created fifteen years ago to serve students with special learning needs. In contrast, students are placed in Jerry's classes without regard for their intellectual skills.

Because we wanted to find out what students were learning, we realized that we needed to be in classrooms looking, listening, and talking with students. In early fall we all observed in Pete's classroom over a two-week period. Not long afterwards we met over dinner to talk about what we had seen. Before we started we set a rule: that as the teacher, Pete could stop us at any time and say that he'd heard enough and/or that the observer didn't know what s/he was talking about. This rule has helped us make it comfortable for us to observe one another routinely. It has helped us violate common professional norms which keep teachers in their own classrooms, preventing them from "snooping" around and "gossiping" about the work of colleagues.

As we talked about our observations, we saw how hard our questions were. Furthermore, because the teachers were taught every day we began to connect our inquiry more closely to the decisions Pete and Jerry made daily. Although we continued to look at differences between classes (fundamental skills and general, for example), we began to focus more on dynamics within classes—on how what we do as teachers shapes what and how all students understand and learn social studies.

As we studied our observational data from Pete's class, we looked at what students did to resist learning history as well as what happened when they actually did the activities and engaged in discussions. Jerry and Pete pointed out that although students were similar in terms of race, ethnicity, and social class, they differed greatly in other ways—in their understandings of the course content, in their prior experiences and ways they thought about the material, in their motivation to learn, in their abilities, and in their willingness to question and disagree with the teacher and/or their peers. And so by the end of our first fall working together, we were, as team member Tom Bird explained, down to this:

We need to think about what it means to teach all students together. What is different among kids, their expectations, abilities to do certain tasks, reading level, and/or social skills?

Studying while Doing

Our observations and talk continued through the 1989-90 school year, mostly on Fridays when Tom and I regularly watched Pete's and Jerry's classes. During class while students worked, between classes, over lunch, and after school, we swapped obser-

vations about how small groups were working and what students seemed to be learning. We came to realize as observers that Pete and Jerry needed immediate feedback since we were making changes that immediately affected students and teachers. During 1990-91, we met two to three times a month during our Wednesday morning reallocated time [see Changing Minds 2, Making Time to Make Change for a discussion of this restructured time].

During meetings, we talked about what we wanted to happen in classes—the kinds of instruction we aimed for and the curricular content we thought important for students to learn. To help us, we conducted interviews in which we asked students what they thought they were learning, what sense they made of it, and why they thought they were learning it. When we asked why they thought they had been placed in the fundamental skills, general, or honors classes, honors students generally noted their keen interest and high motivation. Fundamental skills students, on the other hand, pointed to what they called low ability. Many told us their reading level, explaining that since they could only read at a ninth-grade level (as identified by a standardized test) they would have trouble reading a textbook aimed at 10th or 11th grade. They felt that the slower pace and easier reading of the fundamental skills class helped them cope with what seemed like a large amount of content.

Backing up to our first question—to track or not to track—and hoping to learn what characteristics distinguished students in different sections, we opened cumulative records of students from the different sections of American History and in the heterogeneous applied economics and government classes. The records and our ongoing observations of students in classes raised questions about
how students perceived themselves, their abilities, and their roles in learning social studies. We were surprised to learn that some students in both general and fundamental skills classes seemed equally motivated for learning and had healthy self-esteem. So we wondered why and how students are separated into different sections.

At a meeting in February, 1990, the team challenged its own practical deliberations. My field notes say:

We need to consider the options available. We want to do better than we are now. Now we need to decide which path to take: segregation [keeping the fundamental skills section intact] or integration [closing down that section, and putting students traditionally placed there into regular sections]. We either need to decide how to do the fundamental skills class better, or how to team better—that is, to work with special education teachers in our regular classes.

Learning About Groupwork

Finding that we had many questions about the criteria used for assigning students in sections—fundamental skills, general, and honors—and about the educational value of these distinctions for students and for teachers, we began to experiment with different grouping arrangements within each general American history section (these classes had the widest range of intellectual abilities). Sometimes students worked with peers they chose, at other times in groups of three or four. Occasionally Pete put together students who often didn’t finish assignments, hoping they might push each other to complete a task. We continued to observe students carefully, to interview them, and to discuss what we were learning. During these early efforts Pete shared with me his beliefs about groupwork:

Cooperative grouping works best with finite, graphic, and visual activities aimed at creating a product. They also shouldn’t be very long, on-going activities that extend over many, many class periods.

In one early experiment that the team helped Pete plan, students worked in groups to develop responses to possible essay questions for an upcoming exam about the progressive era in American history. Each group took one question and analyzed the social, economic, and political forces that might help account for what happened. As they worked, Pete and I watched Lisa, who was leaning forward and flapping her hands in order to make a point. Pete said, “In groups Lisa works hard, but working individually she doesn’t do anything. Combined with that and her inconsistent attendance, she is a failing student. Yet, look at what she is doing in the group.”

We realized that something about what we had planned had turned Lisa on to learning American history. We’d designed and started an activity that required students to work together to create a product that they could see was greatly enhanced by a united effort. In the group Lisa learned her classmates’ ideas and contributed to shaping both her own viewpoint and theirs.

Through this activity, we learned two things. Pete pointed to one of them:

You need a group to design what a cooperative learning group will do. I can’t design something for a group of students if I’m not working myself in a group.

Tom identified another:

We got students to buy into the tasks we designed by changing the character of the tasks.

We could see that students learned something both from the task itself and from the way they did it. We worked hard to teach students how to work with each other, to care and feel responsible toward one another. In discussions and handouts we laid out what we expected to see in groupwork—for example, that every person in the group should be ready to answer questions from the teacher and students during group oral presentations. We awarded points which figured prominently in individuals’ final grades when we saw (as Pete noted in a handout) “equality of participation, influence, and access... inclusion and friendship... problem solving... peer support.”
Experimenting with and studying small group learning became a strategy for understanding the way diversity works in a classroom. By observing what students said and did, we learned that social interaction enhanced both students' abilities to make sense of the content and their willingness to do so. By looking carefully at what we planned, at our expectations and reasoning, and at what we said to students (what Pete calls giving students a "compelling reason to act"), we discovered that there were better and worse student tasks. Different tasks and purposes led to different kinds of cooperative work among students. Good tasks were authentic and related to the real world; students saw them as helpful for making sense of the social world in and outside of school. When students could see that, for this task, three heads really were better than one, they gave the project fuller attention and even pushed beyond the teachers' questions.

The team helped Pete design and refine activities in which students, working in groups of three, wrote essays using a computer. Team members concluded that because students could discuss what was on the screen and change it easily, they became "actively engaged in learning...by picking out what is important and arranging it [in the text]." One of us noted:

Differences of opinion among students can be handled better with the screen. What's really important here is the conversation and the computer helps to make the conversation happen.

Acting on what we have learned, we now try to scaffold the understandings students need to develop in group essays. For instance, in American history we've added assignments that ask students to make matrices in which they compare historic events and connect them to particular themes. Most recently, American history students analyzed American internment camps for Japanese nationals and citizens and Nazi concentration camps and wrote about how elements of racism, intolerance, force, militarism, provocation, and genocide manifested themselves in both. In psychology, Jerry's students considered the relationship of physiological structures to intelligence, putting their analyses together to create both individual and group products.

**Studying, Doing, and Tracking**

Looking back to our team's roots at the 1989 Summer Institute, I realize we've approached our investigation of tracking differently than what we had imagined. Though still grappling with issues of diversity, we are now making the inquiry at two levels: in classrooms, looking at various kinds of grouping practices that support students' struggles to make sense of social studies content; and at the department level, looking at students' academic and social learning in different sections of American history. We haven't abolished tracking in social studies; we haven't even decided whether we want to. But we have made important changes in our classrooms that help us understand the ways that different young people make sense of social studies and their learning. And along the way, we've looked at our own learning, made richer by working with colleagues, as we experiment with new kinds of teaching.

**Editor: Helen Featherstone**

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