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ABSTRACT

This report contains results from a survey of U.S. fourth and eighth grade teachers that examined their teaching philosophies, classroom teaching methods and practices, academic expectations for students, and opinions on other education policy issues. Overall, a majority of teachers described their teaching philosophies as leaning more toward student-directed learning. Most favored the premise that learning how to learn is extremely important for students. More than half of fourth grade teachers did not expect students to spell correctly at all times. Only about one quarter of all teachers placed the greatest emphasis on whether the student provided the correct answers. While only about one-fifth of fourth grade math teachers allowed students to use calculators in class to solve problems, about three-quarters of eighth grade teachers permitted such calculator use. About one-third of teachers rated student feedback as the most important factor in personal evaluation of their own work. Over half of fourth grade teachers preferred small-group cooperative learning to whole-class instruction. Most teachers considered parents an asset to education processes. A substantial majority favored ending social promotion of students and believed that their schools' policies gave them enough authority to effectively maintain order in the classroom. (SM)

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ED 470 233

What Do Teachers Teach? A Survey of America's Fourth and Eighth Grade Teachers

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EXECUTIVE SUMMARY

The report contains the results of a survey of America's 4th and 8th grade teachers. Teachers were asked about their teaching philosophies, their classroom teaching methods and practices, their academic expectations for their students, and their opinions on other issues of education policy. Some of the survey's most important findings are:

- A clear majority of teachers surveyed (56%) describe their teaching philosophies as leaning more in the direction of student-directed learning, rather than in the direction of teacher-directed learning.
- More than seven in 10 teachers indicated that they favor the premise that "learning how to learn is most important for students"; Fewer than 15% believed it is was most important to teach students "specific information and skills."
- More than half of fourth grade teachers say they do not expect their students to spell correctly at all times.
- In evaluating student work, only about one quarter of fourth and eighth grade teachers place the greatest emphasis on whether the student provided the correct answer.
- Nearly 6 in 10 fourth grade teachers say they base final grades for students more on each student's individual abilities than they do on any "single, class-wide standard."
- More than 2 in 10 fourth grade math teachers report regularly permitting students to use calculators in class to solve math problems. By the eighth grade, the use of calculators has become widespread, with 70% of teachers reporting that they permit such use.
- Many eighth grade students may not get enough writing practice to enable them to master composition. 15% of eighth grade teachers never give their students homework including at least one page of writing, and 31% require their students to write, edit, and complete a composition of at least 250 words (three to four paragraphs) no more than once a month.
- Just half of eighth grade science teachers expect most of their students to know the general form, location and function of the human body's major organ systems. Two in ten thought none of their students would know this by year's end.
- Only 70% of eighth grade history teachers expect that all or most of their students will know when the Civil War was fought.

Other important findings include:

- Three in 10 fourth grade teachers and nearly 4 in 10 eighth grade teachers rated student feedback as the most important factor in personal evaluations of their own work.
- 55% of the fourth grade teachers surveyed indicated that they prefer cooperative learning in small classroom groups, more than twice the percentage (26%) of those same teachers who indicated a preference for whole-group instruction.
- Many fourth grade students may not be getting enough practice writing and learning new words. Two in ten fourth grade teachers say they assign their students lists of new words less than once a week or never at all, and 42% say that they assign only one writing assignment longer than a paragraph per week.

- While five-sixths of fourth grade teachers expect that all of their students will master such basic tasks as adding and subtracting two- and three-digit numbers, teacher expectations drop as tasks get more complex. For example, 31% of teachers think half or fewer of their students will be able, by year's end, to compare fractions with like and unlike denominators.
- Eighth grade math teachers have expectations for their students similar to those of their fourth grade counterparts. While 80-90% expect all or most of their students to understand such concepts as calculating basic statistics or evaluating basic algebraic equations, the numbers drop off as tasks become more complex. For example, only 58% expect all or most of their students to memorize and use the Pythagorean theorem, and only 44% expect all or most of their students to convert measurements from one unit, such as feet per second, to another, such as miles per hour.
- Eighth grade English teachers also show levels of expectations similar to their fourth grade counterparts. While 87% of them expect all or most of their students to write and speak standard English, only 65% expect their students to understand such underpinnings of high school and college English study as characterization in fiction and literary devices such as simile and metaphor.
- Eighth grade science teachers have low expectations for their students. Only 65% thought that all or most of their students would understand Newton's law of gravity; only 42% thought all or most would understand the theories of natural selection and evolution.
- Judging from history teachers' expectations, students will have large gaps in their knowledge about 20th Century America. For example, 77% of eighth grade history teachers say all or most of their students will know that Martin Luther King gave the "I have a dream speech," but only 27% say all or most of their students will know that the New Deal was F.D.R.'s program to cure the Great Depression. 49% of teachers say none of their students will know about the New Deal.
- Nearly a quarter of the eighth grade science teachers surveyed maintained that their primary interest was to emphasize the role science plays in contemporary political debates.
- Parents are considered an "asset" to the educational process by 81% of fourth grade teachers and by 74% of eighth grade teachers.
- A substantial majority of the teachers surveyed favor ending the social promotion of students, even if that means significantly more students will be held back. Fourth grade teachers from urban and lower income schools are especially likely to favor ending the practice.
- An overwhelming majority of teachers (92% of fourth grade teachers and 88% of eighth grade teachers) feel their school's policy gives them enough authority to effectively maintain order in the classroom.

TABLE OF CONTENTS

| | |
|------------------------------------------------------------------------------|-------------------|
| About the Authors | <i>i</i> |
| Acknowledgments..... | <i>i</i> |
| Foreword..... | <i>iii</i> |
| Introduction..... | 1 |
| Summary of the Findings | 2 |
| General Teaching Philosophies and Evaluation Methods..... | 4 |
| Methods of Classroom Instruction | 7 |
| Teacher Expectations in the Classroom..... | 9 |
| Fourth Grade Math | 9 |
| Fourth Grade English | 10 |
| Eighth Grade Math | 11 |
| Eighth Grade English | 12 |
| Eighth Grade Science | 13 |
| Eighth Grade History | 15 |
| Multi-culturalist Approaches to Teaching..... | 17 |
| Teacher Perspectives on Current Issues in Education Policy..... | 17 |
| Teacher Control over Curricula, Methods and Standards | 17 |
| The Role of Parents in the Educational Process | 18 |
| Social Promotion | 20 |
| School Discipline | 21 |
| Appendix A: Profile of Teachers and Respective Schools Surveyed | 23 |
| Appendix B: Methodology | 24 |

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FOREWORD

In 2002, standards-based reform has become America's main strategy for boosting student achievement, strengthening school effectiveness and renewing our education system. It undergirds President Bush's "No Child Left Behind" Act as well as the reform efforts of nearly every state and community.

We normally describe standards-based reform as resting on a tripod of academic standards, testing and accountability. The standards spell out the skills and knowledge that schools are supposed to impart and students are meant to learn, grade-by-grade and subject-by-subject. The tests or assessments inform parents, teachers and policymakers as to how well those standards are being met, child-by-child, school-by-school and state-by-state. "Accountability" signals an array of incentives, interventions and sanctions meant to encourage progress toward the standards by rewarding those who succeed in attaining them and making life less pleasant for those who do not. Thus a student gets promoted to the next grade, or given a high-school diploma, if he meets the academic standards, but is held back or sent to summer school if he does not meet them. A principal gets praise and, perhaps, a bonus if her school attains the standards, but may get re-assigned or even fired if it does not.

Standards-based reform is thus an elaborate and deeply behaviorist scheme for altering the actions and priorities of students and educators in order that the children end up learning more and the schools end up producing stronger results.

But standards-based reform works only upon the outside of education's "black box". It deals with goals, measures and consequences, not with what happens inside the classroom. It does not tell teachers what to do differently when the door is closed and it does not cause students to learn. At the end of the day, therefore, the success of standards-based reform will be determined not by the policymakers who shape it but by the teachers and pupils whose everyday decisions and priorities actually shape what is taught and what is learned.

What goes on *inside* the education box? And to what extent does it advance or retard the hopes and intentions of the standards-writers and policymakers beaver-ing away on the outside? Everyone knows that, once the classroom door is shut, the teacher is in charge. What she deems important, what she knows, what she cares about, how she spends her time—all these have immense impact on what her students end up learning (and valuing).

One way to find out what teachers believe and judge to be important is to ask them. Though plenty of teacher surveys have been conducted over the years, few have probed teachers' views of the key elements of standards-based education reform.

This study is different. Working with a carefully chosen national sample of 4th and 8th grade classroom teachers in America's schools, it inquired into their educational philosophies and instructional methods, about their view of standards and their curricular priorities.

The selection of fourth and eighth grade was no accident. For many schools and educators, those years mark the end of "primary" and "middle" schooling, i.e. major transition points in children's passage through the formal education system. Moreover, they (along with twelfth) are the grades when the National Assessment of Educational Progress (NAEP) regularly appraises and reports on student achievement in core academic subjects, both for the nation as a whole and for individual states. Even more emphasis will be placed on NAEP testing in those grades under the provisions of the No Child Left Behind Act, as NAEP results will serve as a kind of external audit of state-level progress toward that statute's ambitious goals. But we already have mountains of NAEP data, accumulated over three decades, as to what youngsters in grades four and eight actually know and can do, how many of them are "proficient" (usually fewer than one-third), how many are "below basic" (30-50%), etc. We are regularly alarmed by press accounts and

solemn emanations from Washington concerning the latest gloomy NAEP results at these grade levels. Mindful that NAEP results are the cumulative product of several years of instruction, it nonetheless made sense to select these same transition grades to inquire of classroom teachers what they think about education, what they value and how they use their time.

The results are revealing, fascinating and more than a little alarming. Though there is some good news here for devotees of standards-based reform, five of this study's findings seem to me particularly vexing because of the chasm they display between the views of teachers and the expectations of reformers.

First, a majority of teachers in both fourth and eighth grade opt for "student-directed learning" rather than "teacher-directed learning". No more than two teachers in five affirm a philosophy of education in which they, the adults in the classroom, are supposed to set the agenda, decide what youngsters will learn and usher their pupils toward that destination. "Student-directed" learning is an old progressive-educator notion, a variation on "child-centered" education, that traces back to John Dewey and his apostles. It means that children's own interests and stages of development matter more than mastery of subject matter in shaping what teachers and pupils work on in class each day. Yet it's nearly impossible to imagine standards-based reform succeeding in classrooms where students direct the key decisions about what will be learned. Standards-based reform presupposes that teachers will take charge of prescribing what skills and knowledge must be learned—and that they will persist until their young charges have in fact learned those things.

Second, three quarters of teachers have embraced the college-of-education dogma that the purpose of schooling is to help youngsters "learn how to learn" rather than to acquire specific information and skills. Barely one teacher in seven holds the view that educators' core responsibility is "to teach students specific information and skills". When evaluating student work, just 25 percent of fourth grade teachers (and 28% of eighth grade teachers) place primary emphasis on whether pupils supply the right answer or correct information. Yet standards-based reform is all about the successful acquisition of specific information and skills. Few would argue that schools ought not *also* assist their pupils to "learn how to learn" more in the future. But standards-based reform cannot succeed where that is deemed to be the school's chief mission. Nor can it succeed where teachers put greater stock in student creativity and effort than in accuracy.

Third, not even two out of five teachers in fourth grade base their students' grades primarily on a "single, class-wide standard", while the majority place heavier emphasis on individual children's abilities. In other words, they opt for a relativistic, child-centered mode of evaluating pupil achievement instead of an unchanging objective standard. (This is also the case with nearly half of eighth grade teachers.) Yet the essence of standards-based reform is judging youngsters according to their success in meeting a fixed standard of learning or reaching proficiency in particular subjects. How odd it will be, to say the least, if children grow accustomed in class to relativistic grading practices and are then hit by an unyielding standard on the statewide exam at year's end. How confusing that will be for children and parents—and how damaging to the cause of standards-based education reform.

Fourth, teachers do not seem to have terribly high expectations for their pupils when it comes to how much and how well they will end up learning. Despite the popular educationist mantra that "all children can learn" and notwithstanding the core principle of standards-based reform that *no child* will be left behind and that *every youngster* will attain his state's core academic standards, teachers do not quite buy that. Fewer than half of those teaching fourth grade expect their students always to spell correctly. Less than half of eighth grade math teachers expect all of their students, by year's end, to be able to show why the angles of a triangle add to 180 degrees. (One quarter of eighth grade math teachers do not even expect this from a *majority* of their pupils.) Only 70 percent of eighth grade history teachers expect that, by the time they enter high school, the majority of students in their classes will know when the Civil War was fought. How can Congress enact a law mandating that every child in every state will (within twelve years) attain "proficiency" on state standards if many of those children's classroom instructors have no such expectations?

Finally, and most bluntly, one third of fourth grade teachers and 30 percent of eighth grade teachers do *not* agree that "a teacher's role is primarily to help students learn the things that your state or community has decided students should know." In other words, these instructors seemingly don't believe in state academic standards or, at least, they don't see helping youngsters meet such standards as the single most important mission of the school.

There is much, much more in these data, including some good news for education reformers. (Teachers don't believe in social promotion, for example, and they view parents as primarily an asset in their work.) We find tantalizing differences between new teachers and their more experienced colleagues. We are treated to revealing glimpses of the instructional practices that teachers select for their classrooms. One should by no means castigate teachers, much less the conscientious instructors who cooperated with this survey, for harboring wrong attitudes or using ill-chosen methods. They are what they are. They are what they've been told to be by those who trained them yesterday and who supervise them today. For the most part, I believe, the attitudes, expectations and priorities of teachers, as well as the methods they employ when the door is closed, reflect above all the influence of their ed-school professors and their mentors and peers within the education profession.

The problem—a big one—is that the professors and the profession have not entirely bought into standards-based reform. It goes against their grain. It contradicts their own philosophies of education. Never mind that it's the law of the land, the principal public education dynamic of nearly every state, and the strong preference of most parents. It hasn't permeated the education profession. Hence it hasn't percolated into many of our teachers. The problem ahead is that policymakers—and parents, voters and taxpayers—are destined for another huge disappointment if what happens when the classroom door closes does not advance the goals that were so hopefully enshrined in those statutes, those hard-fought standards and those sometimes onerous accountability systems. An education train wreck may well lie ahead.

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WHAT DO TEACHERS TEACH?

A SURVEY OF AMERICA'S FOURTH AND EIGHTH GRADE TEACHERS

INTRODUCTION

Educational reform is among the chief domestic policy concerns in the United States today. Debates over the merits of school vouchers, mandatory student educational testing, heightened teaching standards, and the most proper means of disciplining students have been waged in recent years among officials at the national and state government levels, as well as among local school boards and parent-teacher organizations. Although the primary goal of most schools should be to train their students in the basic skills and knowledge they will need to prosper in society, that goal has been somewhat obscured—if not outright compromised—by conflicts raging within and outside our nation's schools.

How are school officials and teachers expected to meet the variety of challenges facing them today? What teaching methods and approaches are most likely to train large numbers of students in the skills and knowledge they will need as adults? Teachers themselves work on the front line in this battle; their perspectives on teaching deserve the careful attention of officials charged with promoting educational reform. It would seem in recent years increasing numbers of instructors have begun to emphasize a "relativistic" approach to teaching students—they define student success based on subjective standards of student creativity and effort, rather than on any objective or absolute standard. Just how widespread has this more subjectivist approach become? And what impact has it had on the classroom as a whole? To date, few comprehensive national surveys of teachers addressing specific teaching approaches and methods have even been conducted.

Early in 2002, the Manhattan Institute for Policy Research sought to better understand the methods teachers employ in the classroom—relativistic or otherwise—as an initial step in the process of promoting dialogue on educational reform in the United States. Specifically, the Manhattan Institute commissioned the Center for Survey Research & Analysis at the University of Connecticut to conduct a series of focus groups and two national surveys of fourth and eighth grade teachers, respectively, concerning their philosophies and methods of teaching.

Certainly a "one-size-fits-all" approach to education may sometimes prove inadequate to the task at hand. Fourth and eighth grade classrooms present a host of different challenges—history and English may differ dramatically from those that work in math and science classes. Moreover, differences among individual schools themselves—including the demographics of their student bodies, their respective locations, and the overall experience levels of their respective teachers—may figure prominently in determining the success of specific reforms.

Accordingly, the Manhattan Institute's survey sought to understand the different types of problems and challenges facing teachers across the nation, with an eye towards identifying various pedagogical approaches and their influence in the classroom environment. Specifically, the survey sought to address the following issues:

- What philosophy of teaching do most teachers utilize in the classroom? Do teachers on the whole emphasize student-directed learning or teaching-directed learning? How do teachers evaluate the success of the educational process overall?
- What specific objectives do teachers seek to fulfill in the classroom? How do teachers allocate time in the classroom to meet those objectives?
- What types of math and English skills are fourth and eighth graders expected to master?

- What types of science and U.S. history knowledge are eighth graders expected to have?
- Has the adoption of so-called "multiculturalist" approaches to teaching English, history, and science affected the nature of classroom instruction?
- How much influence do teachers have in shaping the classroom environment? Do they maintain control over the topics they will cover and the teaching methods they will employ?
- What role do parents play in promoting the education of students? Are they an asset or liability in the educational process?
- How important is classroom discipline to a successful classroom environment? Do teachers have enough authority to effectively maintain discipline?

The Manhattan Institute/University of Connecticut survey on teaching methods in fourth and eighth grade classrooms was conducted by the Center for Survey Research and Analysis at the University of Connecticut. Two separate surveys were administered. A total of 403 interviews with fourth grade teachers who taught either math or English were conducted between January 18, 2002 and February 2, 2002. A total of 806 interviews with eighth grade teachers who taught in a specific subject area (math, science, history or English) were conducted between January 26, 2002 and February 9, 2002. A complete list of the questions asked and the responses is found in the web version of this report, found at www.manhattan-institute.org/html/cr_28.html. A more detailed description of the methodology is located in Appendix B.

We believe these survey results provide important new data that can help ascertain what is really going on inside America's classrooms and add to the ongoing debates.

SUMMARY OF FINDINGS

As a general matter, teachers are not presently in a state of revolt against traditional forms of education. Traditional academic subjects that have been taught for decades continue to be taught, and many teachers conscientiously strive to promote academic excellence in the classroom. Still, an increasing percentage of teachers have started to adopt a more "relativistic" or "subjectivist" pedagogy and outlook, and this trend in the teaching profession is starting to manifest itself in the way teachers approach grading practices, self-evaluations of their personal job performances, and in the different methods of teaching they choose to emphasize within the classroom itself.

Currently a majority of teachers across the country favor a student-directed learning philosophy. Specifically, 55% of fourth grade teachers and 57% of eighth grade teachers indicate that they lean towards the student-directed approach, as compared to just 40% of fourth grade teachers and 37% of eighth grade teachers who favor "teacher-directed learning." When teachers were asked more pointedly about their own teaching philosophies, the most frequently provided responses included "student/child centered," and "teacher makes adjustment for needs."

The interest in relativistic and subjectivist teaching approaches is reflected in the prevalence of less objective standards for grading students. Four in 10 teachers nationwide indicated a preference for grading based on whether the student approached the task in a "creative and thoughtful way," while an additional 1 in 4 expressed a preference for grading based simply on "how hard the student tried." By contrast, barely a quarter of the teachers surveyed favored grading based on whether students got the correct answers or provided the correct information.

Teachers' approaches to self-evaluation may also be influenced by this relativistic philosophy of teaching. Nearly 4 in 10 eighth grade teachers and 31% of fourth grade teachers ranked feedback from students as the most important factor in the evaluation of the job they are doing. Indeed, among eighth grade teachers

in particular, student feedback ranked as a far more important factor than any other mentioned, including even student scores on teacher-created assignments. Similarly, classroom instruction methods have been shaped by the prevalence of student-directed teaching philosophies. While whole-class instruction still takes up a large bulk of class time, small group exercises are becoming more routine features in many classrooms, especially in the classrooms of younger and less experienced teachers.

With student-directed teaching philosophies emphasizing student creativity and effort over simply attaining the correct answers, many students are not expected to acquire more than basic knowledge of math and English. Furthermore, large numbers of students are not expected to know basic facts about science and U.S. history. These diminished expectations may be at least partially a consequence of so many recent teachers' emphasis on relativistic philosophies.

Interestingly, a substantial majority of teachers in this country believe that on average, parents of students are an asset rather than a liability in the educational process. (Teachers hailing from urban and predominantly minority schools gave the lowest rating in this regard, though fully two-thirds still believed parents were an asset in the educational process). Additionally, nine in 10 teachers nationwide think that their school's policies already give them enough authority to effectively maintain order in the classroom.

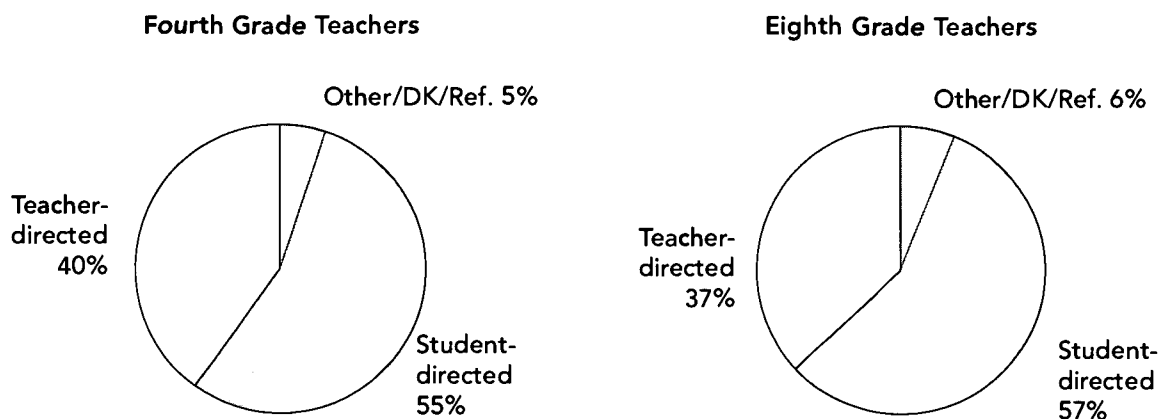
Teachers themselves remain a mostly untapped resource for government officials and others considering educational reform in the nation's schools. Even after this current study, many questions still remain for teachers, especially for those who teach students outside of the fourth and eighth grades, and for those who teach subjects other than math, English, science and history. Still, this study offers some sobering data for many. Certainly students in the nation's fourth and eighth grade classrooms continue to be taught important topics. But the growth in influence of relativistic teaching methods may be preventing the potential of many students from being maximized.

GENERAL TEACHING PHILOSOPHIES AND EVALUATION METHODS

As this study makes apparent, the current crop of teachers is increasingly relativistic in its pedagogy and outlook towards classroom learning. Instead of more traditional teacher-directed learning strategies, student-directed teaching philosophies have gained favor in many fourth and eighth grade classrooms.

In all, 55% of fourth grade teachers and 57% of eighth grade teachers described their teaching philosophies as leaning towards "student-directed" learning, as compared to just 40% of fourth grade teachers and a mere 37% of eighth grade teachers who say their teaching philosophies lean towards "teacher-directed" learning.

"Which way do you lean—more toward teacher directed learning OR more toward student directed learning?" (Data from Questions 4 & 4A combined)

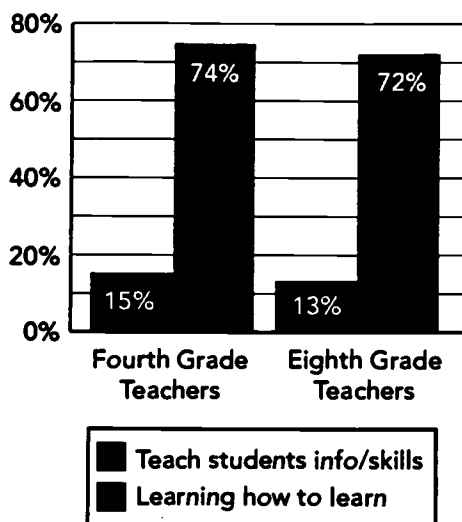


Not surprisingly, more experienced teachers seem less inclined than their newer colleagues to side with this student-directed approach to learning. When asked about their philosophies, 54% of those with 20 years or less experience described their philosophies as "student-directed," as compared to only 44% of those with 21-30 years experience and just 39% of those with 31 or more years of experience.

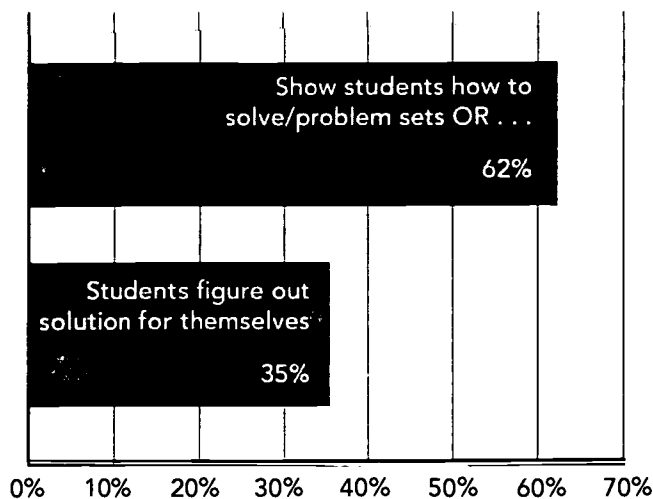
When asked more broadly about their teaching philosophies, teachers on the whole confirm this new "student-directed" emphasis. Among eighth grade teachers, by far the most frequently mentioned approach was one termed "student/child centered" where the "teacher makes adjustment for needs." This was mentioned by one quarter of the eighth grade teachers surveyed. Sixteen percent of eighth grade teachers, including 25% of the eighth grade science teachers, described their philosophy as "Teacher as a facilitator/guide, with students as independent learners". No other philosophy garnered mention by more than 10% of the eighth grade teachers surveyed.

Fourth grade teachers' most frequently mentioned philosophies were "student/child centered, teacher makes adjustment for needs" (21%) and a philosophy summarized as "all children can learn; only their pace or style changes" (that philosophy was mentioned by 22% of the fourth grade teachers surveyed, as compared to just 4% of the eighth grade teachers who mentioned it). Interestingly, fourth grade teachers from schools that draw primarily on minority populations were much more likely to tout the "All children can learn philosophy," with 31% of those teachers mentioning that approach when asked (9% more than the percentage of fourth grade teachers overall who mentioned it).

"Generally speaking, which of the following two teaching philosophies is closest to your own: (A) 'It is most important to teach students specific information and skills'; or (B) 'Learning how to learn is most important for students'?"



"Different teachers have different approaches to math. I'm going to read several pairs of approaches to teaching math, and for each pair ask you to pick which approach comes closer to describing your approach to teaching your 8th grade math students..."
 (Eighth grade respondents only)



What is the real-world significance of this apparent backlash against more traditional teacher-directed approaches? One possibility is that the more traditional emphasis on basic skills for students may be compromised. In fact, a significant majority of teachers surveyed sided with "learning how to learn" as being more important to students than simply teaching them specific information and skills—upon first mention, 74% of fourth grade teachers and 72% of eighth grade teachers described that philosophy as more closely aligned to their own.

In part, this new teaching philosophy has manifested itself in the way that eighth grade math instructors in particular approach classroom instruction. In all, 61% favor having their students solve "real world" problems over more traditional drills and practices on math facts and computations. And while 62% of the eighth grade math teachers would first show students how to solve problems and then do problem sets, 35% of those surveyed confess to simply introducing problems to students, and then acting as a "facilitator as students try to figure out the solution for themselves."

This overall relativistic trend is also reflected in the way that teachers evaluate their respective performances in the classroom. For example, student feedback now enjoys disproportionate importance as a factor in teachers' evaluations of the job they are doing. More than 3 in 10 (31%) fourth grade teachers and nearly 4 in 10 (39%) eighth grade teachers rated student feedback as *the most important factor* in such personal evaluations. By contrast, barely more than 3 in 10 fourth grade teachers (32%) felt that students' scores on teacher-created assignments were the most important factor in such evaluations. And only a quarter (26%) of eighth grade teachers felt that way.

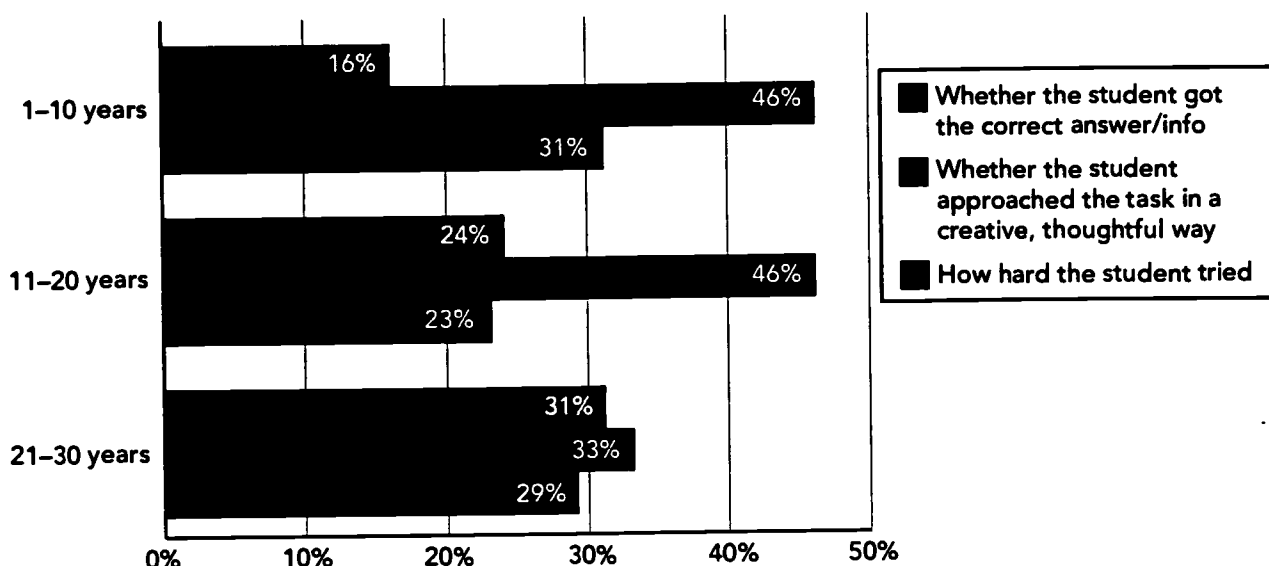
Once again, a more traditional approach to self-evaluation was evident only among the most senior teachers surveyed. For example, eighth grade teachers with more than thirty years experience were less likely to rely on feedback from students (29%) than their newer colleagues. Rather, these veteran teachers were far more likely to rely on their own innate sense of how well they taught their lessons (24%) in guiding self-evaluations of how well they performed as teachers.

BEST COPY AVAILABLE

Naturally, relativistic teaching philosophies also influence the methods by which teachers evaluate individual students. In evaluating student work, teachers tend to emphasize whether the student approached the task in a creative and thoughtful way, as compared to more traditional factors. Specifically, 4 in 10 teachers surveyed nationwide favored an emphasis on student creativity, a significantly higher percentage than those who emphasized whether the student got the correct answer (favored by just 25% of fourth grade teachers and 28% of eighth grade teachers) or even how hard the student tried (favored by 28% of fourth grade teachers and just 23% of eighth grade teachers). Newer fourth grade teachers were especially likely to emphasize student creativity and thoughtfulness in the grading process, with 46% of teachers in their first 20 years on the job emphasizing that factor, as compared to just 33% of those fourth grade teachers who have logged between 21 and 30 years in the teaching profession.

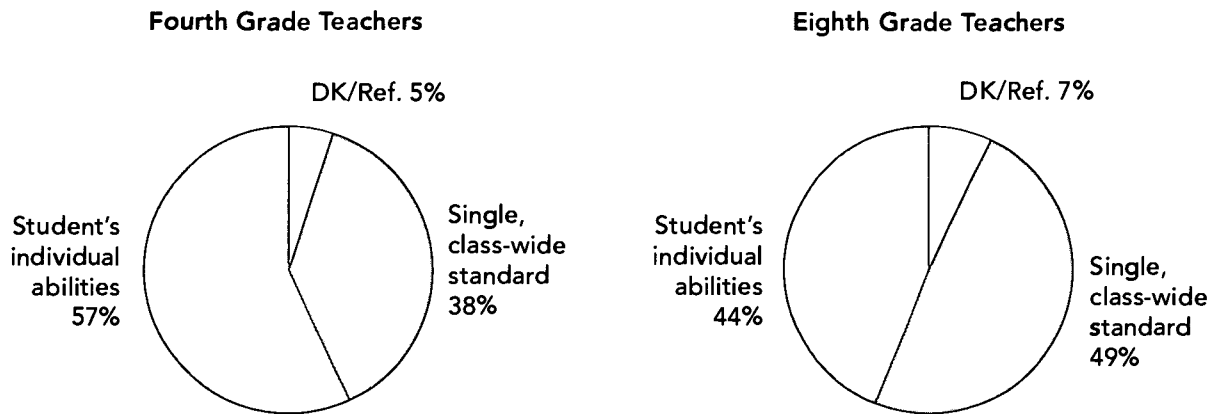
"In evaluating student work, do you place the greatest emphasis on...:"

Eighth grade teachers, by years of experience



How do teachers translate the skills they wish to evaluate into individual grades for students? Nearly 6 in 10 fourth grade teachers (57%) say they base final grades for students more on each student's individual abilities, considerably more than the 38% who base year-end grades on a "single, class-wide standard." Interestingly, eighth grade teachers are slightly more likely to base student grades on the class-wide standard (49%) than they are to base the grades on individual abilities (44%).

"Generally speaking, are your final year-end or marking period grades for students based more on a single, class-wide standard or are they based more on each student's individual abilities?"

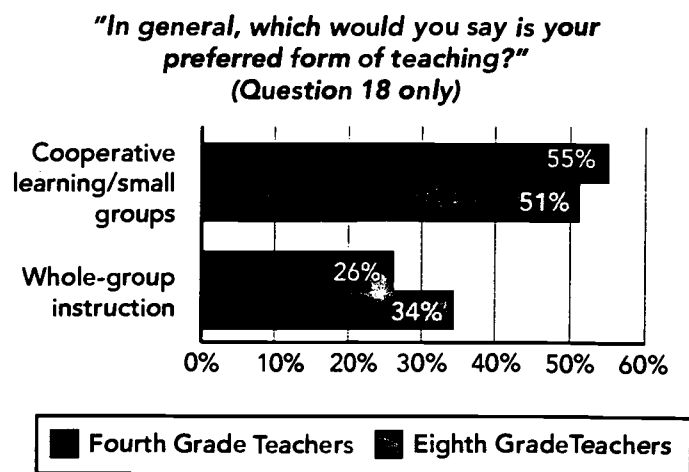


Still, fourth grade and eighth grade instructors alike tend to allow their relativistic teaching philosophies to infiltrate the grading process. For example, fully 64% of fourth grade math teachers said they thought grading based on strategies used to solve a problem (regardless of whether the resulting answer was correct) was a more effective approach than grading based on the right answers, which was favored by just 33%. And 54% of eighth grade math teachers graded students based on the strategies used, rather than on the basis of getting the right answers.

METHODS OF CLASSROOM INSTRUCTION

How do these trends play out in the classroom itself? Although teachers continue to perform many traditional functions in the classroom—lecturing, giving out homework assignments, etc—significant minorities of teachers do not perform those functions as much as they used to. And increasing numbers of teachers have de-emphasized these traditional methods of classroom instruction in favor of small-group, cooperative learning exercises that may or may not succeed in providing basic skills to students.

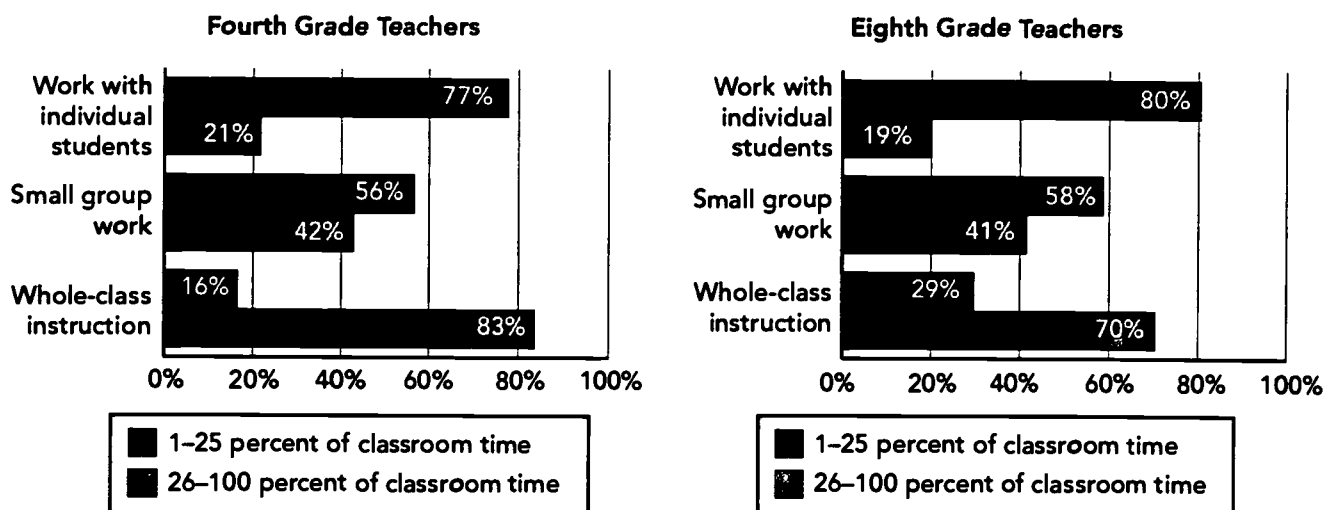
For example, among the fourth grade teachers surveyed, 55% indicated that they prefer cooperative learning in small classroom groups, more than twice the percentage who indicated that they preferred whole-group instruction (26%). Eighth grade teachers are nearly as enthusiastic about small-group learning, with 51% indicating they preferred cooperative learning in small groups, as compared to just 34% who said they preferred whole group instruction. Not surprisingly, cooperative learning is especially popular among younger teachers: Approximately 6 in 10 teachers aged 35 or under expressed a preference for such small-group learning exercises.



The clear preference expressed by so many teachers for small-group cooperative exercises is reflected in the amount of time they dedicate to such activities, and the decreased amount of time being spent in more traditional, teacher-directed formats. In all, just 35% of fourth grade teachers and a mere 29% of eighth grade teachers spend more than half of their weekly classroom time on whole class instruction. By contrast, small-group work is increasingly filling the gap, with 42% of fourth grade teachers and 41% of eighth grade teachers spending at least a quarter of their weekly classroom time on small group work and exercises.

Perhaps more amazing, even with the economic crunch on school budgets forcing increases in classroom sizes across the country, teachers still manage to mix in a significant amount of time with individual students—21% of fourth grade teachers and 19% of eighth grade teachers indicated that they spend at least a quarter of their weekly classroom time on working with individual students.

"Please tell me approximately what percentage of your weekly classroom time is spent on each of the following..."



Among eighth grade instructors, whole class instruction was more frequently employed in schools drawing on lower-income populations. Fully 73% of eighth grade teachers from lower income schools and 70% from middle-income schools employed whole class instruction for at least a quarter of the week, while just 63% of eighth grade instructors from higher-income schools tended to do so.

Low expectations of homework mark this modern trend in classroom practices as well. Only 7% of fourth grade instructors and 9% of eighth grade instructors indicated that they assign homework every day including weekends; by contrast, 21% of fourth grade instructors and little more than a third (35%) of eighth grade instructors confess that they assign students homework less than three nights during any typical week.

Teachers also are less likely than expected to see themselves as the primary academic motivators for students. Indeed, almost 3 in 10 of all the teachers surveyed (27% of eighth grade instructors and 30% of fourth grade instructors) *disagreed* that a teacher's role is primarily to help students excel academically.

Finally, in math classes across the country calculators have become a key tool for teaching math. Unfortunately, when calculators are too heavily relied on, basic math skills may decline. As early as the fourth grade, when math skills are first being learned, 22% of teachers report regularly permitting students to use calculators in class to solve math problems. By the eighth grade the use of calculators is widespread, with 70% of teachers reporting that they permit such use.

TEACHER EXPECTATIONS IN THE CLASSROOM

Have teachers' relativistic philosophies affected their academic expectations for their students? The survey results suggest they have, although perhaps not to the degree that some critics have suggested. The survey does not find classrooms are learning free zones, where children are taught little but social skills and self-esteem. Most teachers at both the fourth and eighth grade levels do expect their students to master specific skills and acquire specific knowledge that most parents would find familiar and acceptable. But a disturbing minority of teachers do not have such expectations for their students, and many of those teachers who do expect all or most of their students to acquire basic skills and knowledge are decidedly less demanding when it comes to higher level skills and more detailed knowledge.

FOURTH GRADE TEACHERS

Math Expectations

Virtually all fourth grade teachers expect their students to master rudimentary math skills by the end of the fourth grade. For example, 99% think that all or most of their students will master the addition and subtraction of two-digit numbers, 98% think that all or most will be able to add and subtract three-digit numbers, and 81% think that all or most will master multiplication and division of two-digit numbers. Similarly high expectations can be found for other basic accomplishments, such as measuring with a ruler, identifying shapes like triangles and squares, and telling time (see chart below).

I'm going to list some math skills and ask if you expect that all, most, about half only a few or none of your students will be able to do each one by the end of the current school year without the aid of a calculator.

| | All | Most | About half | Only a few | None | Don't know |
|---------------------------------------------------------------------------|-----|------|------------|------------|------|------------|
| Add and subtract two-digit numbers | 92% | 7% | 0% | 0% | 0% | 0% |
| Add and subtract three-digit numbers | 84 | 14 | 0 | 1 | 0 | 0 |
| Multiply and divide two-digit numbers | 39 | 42 | 14 | 3 | 1 | 1 |
| Make measurements of length with a ruler measure in inches or centimeters | 70 | 24 | 6 | 0 | 0 | 0 |
| Tell time to the minute on a non-digital watch or clock | 66 | 32 | 2 | 0 | 0 | 0 |
| Identify triangles, squares and pentagons | 77 | 21 | 1 | 0 | 0 | 0 |
| Calculate the area of rectangles and squares | 43 | 41 | 12 | 4 | 0 | 0 |

Teachers are less confident about the ability of students to comprehend more sophisticated math skills. 31% thought that half or less of their students would be able to compare fractions with like and unlike denominators (e.g., determining whether two-thirds is bigger than two-fifths), and 56% thought that half or less would be able to calculate the area of parallelograms.

English Expectations

Not surprisingly, fourth grade teachers have similar expectations concerning English skills: the more complicated the skill, the lower the teacher expectations. Extremely high percentages of fourth grade teachers believe that it is "very important" that their students master such basic tasks as distinguishing between complete sentences, sentence fragments, and run-ons (90%) and using punctuation correctly (87%) by the time they leave fourth grade. This number drops as tasks get more complex, as the table below shows. For example, only 54% think it is "very important" for their students to master parts of speech and their correct use by the end of fourth grade, and only 43% think it very important that their students recognize and use common prefixes such as pre- and pro- (see chart below).

I'm going to read you a list of elements of English grammar and ask you if you think each one is very important, somewhat important, not very important, or not important at all for your students to master by the end of 4th grade.

| | Very important | Somewhat important | Not very important | Not important at all |
|---------------------------------------------------------------------------------|----------------|--------------------|--------------------|----------------------|
| Regularly using paragraphing in their writing | 67% | 33% | 0% | 1% |
| Recognizing and using the most common prefixes such as pre-, pro-, un- and dis- | 43 | 54 | 3 | 0 |
| Distinguishing between complete sentences, sentence fragments and run-ons | 90 | 10 | 1 | 0 |
| Use of subject and verb agreement | 78 | 22 | 1 | 0 |
| Punctuation and its correct use | 87 | 13 | 1 | 0 |
| Parts of speech and their correct use. | 54 | 41 | 4 | 2 |

Expectations concerning spelling and vocabulary are major exceptions to the foregoing observations. Almost six in ten fourth grade teachers say they do not expect their students to spell correctly at all times in their written work. Even in an age of word processing programs and computer spell checks, the ability to spell correctly is important for students as they move into higher levels of education. 19% of fourth grade teachers say they assign lists of new words to their students less than once a week or never at all. Since an extensive vocabulary is an important ingredient for, and predictor of, academic success in middle and high school, this result causes concern.

A large number of fourth graders may also not be practicing writing enough to master the English language. 42% of teachers say they assign only one writing assignment in excess of one paragraph in length per week. Mastering basic punctuation, spelling and rules of grammar is hard enough for young students; learning to construct an argument or tell a story is harder yet. Without sufficient opportunities to practice these skills, many students will fall short of their academic potential.

EIGHTH GRADE TEACHERS

Math Expectations

Like their fourth grade colleagues, eighth grade math teachers expect mastery of basic skills, but fall short of demanding mastery of more sophisticated material. 95% of eighth grade math teachers expect all or most of their students to master such tasks as calculating basic statistics like means or medians and solving one-step equations with one unknown value, such as $A + x = B$. Impressively high percentages of teachers expect all or most of their students to plot a graph to exhibit data (91%), evaluate basic algebraic equations (86%), and apply the distributive and associative properties to a numeric expression (83%). However, these numbers drop off sharply as the skills demanded grow more complex. Only three quarters expect all or most of their students to show why the three angles of a triangle always add to 180 degrees; 58% expect all or most of their students to memorize and use the Pythagorean theorem; and only 44% expect all or most of their students to convert measurements from one unit, such as feet per second, to another, such as miles per hour (see chart below). Students who do not master these skills, among others, are much less likely to complete rigorous high school math courses which best prepare students for college.

I'm going to read you a list of math skills. For each, please tell me how many of your students—all, most, about half, only a few, or none—you expect will master the skill by the end of the current school year.

| | All | Most | About half | Only a few | None | Don't know | Refused |
|-----------------------------------------------------------------------------------------------------------------------------------|-----|------|------------|------------|------|------------|---------|
| Memorizing and using the Pythagorean theorem | 20% | 38% | 24% | 16% | 4% | 0% | 0% |
| Constructing an equilateral triangle with a straight-edge and compass | 15 | 21 | 13 | 25 | 25 | 2 | 1 |
| Using a calculator to determine the approximate value of an acute angle when given the cosine | 5 | 7 | 12 | 27 | 48 | 2 | 1 |
| Show why the three angles of a triangle always add to 180 degrees | 45 | 30 | 11 | 8 | 7 | 0 | 0 |
| Applying the distributive and associative properties to a numeric expression | 40 | 43 | 13 | 4 | 2 | 0 | 0 |
| Solving one-step equations with one unknown value. For example, $A+x=B$, where the values of A and B are known and x is unknown. | 64 | 31 | 3 | 2 | 1 | 0 | 0 |
| Solving word problems by translating them into algebraic equations | 17 | 41 | 30 | 11 | 2 | 0 | 0 |
| Evaluating basic algebraic expressions | 39 | 47 | 9 | 4 | 1 | 1 | 0 |
| Calculating basic statistics such as mean, median, or mode | 54 | 41 | 5 | 1 | 1 | 0 | 0 |
| Plotting a graph to exhibit data such as the heights of the members of a class | 51 | 40 | 7 | 2 | 1 | 0 | 0 |
| Converting measurements from one unit, such as feet per second, to another such as miles per hour. | 14 | 30 | 32 | 20 | 6 | 1 | 0 |

One confirmation of these findings is found in the responses to another question. When asked what math course best describes the school's standard eighth grade math class, only 21% defined it as "first year algebra," the course which best prepares eighth graders for high school and college level math. The majority (61%) defined this course as "pre-algebra," which could or could not be providing adequate preparation depending upon exactly what is taught. Nearly one in five (18%) of eighth grade math teachers defined their school's standard as "general math" or "something else," demonstrating that many American students are not being prepared at all to become proficient in mathematics. This also highlights the possibility that low expectations for advanced math skills are partially caused by a less demanding curriculum.

English Expectations

Eighth grade English teachers surveyed were also similar in their level of expectations to their fourth grade counterparts. An encouraging 87% thought that all or most of their students would master writing and speaking standard English by year's end. But expectations again declined as skills became more specialized. 72% thought all or most of their students would master the correct use of punctuation; 68% thought that all or most of their students would be able to write clear, organized and persuasive nonfiction essays; and 65% expected all or most of their students to master such underpinnings of high school and college English study as characterization, simile, and metaphor. While most American students appear to be progressing at an acceptable level, significant minorities are not (see chart below).

I'm going to read a list of items that you may or may not expect your students to master by the end of the 8th grade. Please tell me what proportion of your students—all, most, about half, only a few, or none—you expect will know each of these items by the end of the present school year.

| | All | Most | About half | Only a few | None | Don't Know | Refused |
|---------------------------------------------------------------------|-----|------|------------|------------|------|------------|---------|
| Writing standard English | 39% | 49% | 9% | 1% | 0% | 2% | 1% |
| Speaking standard English | 48 | 39 | 10 | 2 | 1 | 0 | 0 |
| Using correct punctuation | 20 | 52 | 22 | 4 | 0 | 0 | 1 |
| Writing clear, organized and persuasive nonfiction essays | 20 | 48 | 24 | 6 | 1 | 0 | 1 |
| Point of view and characterization as elements of fiction | 24 | 41 | 23 | 8 | 1 | 0 | 1 |
| Literary devices, such as irony, foreshadowing, simile and metaphor | 21 | 44 | 24 | 8 | 2 | 1 | 1 |

This trend—most students proceeding acceptably, some students being left behind—was demonstrated in the responses to two other questions. Only 54% of eighth grade English teachers thought it was “very important” that students systematically learn new vocabulary words, and only 36% thought it was “very important” that students practice their spelling. Indeed, 27% thought that regular spelling practice was either “not too important” or “not important at all”. Combined with the lack of emphasis on spelling found on the fourth grade survey, this suggests a systematic lack of attention being paid to spelling throughout American education.

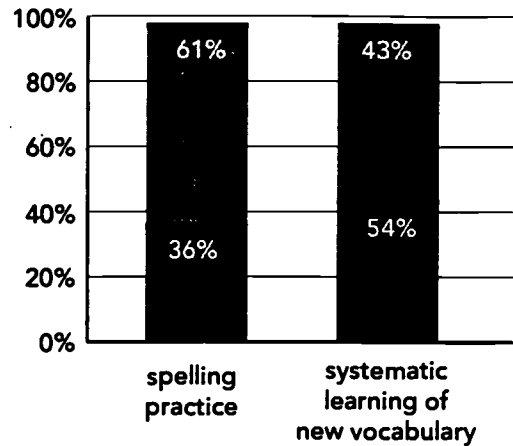
As with the fourth graders, it appears many eighth grade students may not get enough writing practice to enable them to master effective writing. 15% of eighth grade teachers assign no homework at all that includes at least a page of writing. Another 42% state they assign only one such assignment per week. Additionally, 31% of eighth grade English teachers require their students to write, edit, and complete a composition of at least 250 words (three to four paragraphs) once or less per month. Students are unlikely to become proficient writers with such little practice.

Science Expectations

Eighth grade science teachers depart from their colleagues in having uniformly low expectations for their students. The survey asked science teachers about their expectations concerning twelve basic scientific principles often introduced and explained during middle school. Similar questions in math, English and history produced a wide range of expectation levels, with many questions finding that 90% or more of teachers expected all or most of their students to know the fact or master the skill in question. Frequently, as the foregoing charts have shown, 60% or more of teachers thought *all* of their students would master a basic skill or fact.

In contrast, the *highest-ranking* science question saw only 70% of eighth grade science teachers who thought all or most of their students would understand the concept in question (plate tectonics) by the end of the eighth grade. Only 33% thought that all of their students would understand plate tectonics. Science teachers expect many fewer of their students to understand virtually every other science concept on the list. Only 51% expect all or most of their students to know the general form, function and location of the human body's major organ systems; 20% thought *none* of their students would know this. And only 42% thought all or most of their students would understand the theories of natural selection and evolution; a percentage very close to that, 35%, thought that only a few or none of their students would understand this concept, one of the basic building blocks of modern science. A complete listing of the questions and responses is provided in the chart on the following page.

“How important do you think _____ is for your students?” (Eighth grade only)



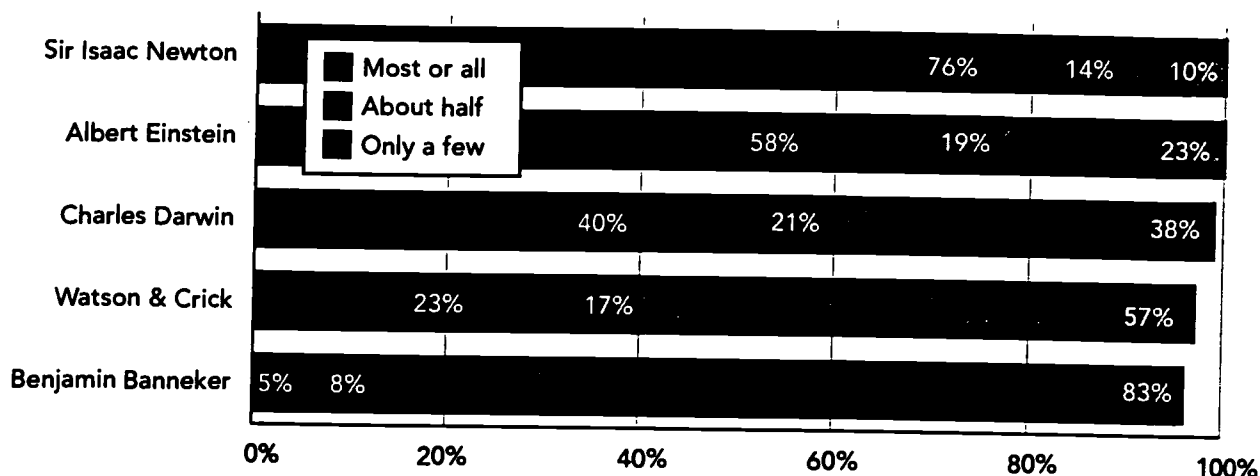
"Somewhat important," "Not too important," or "Not important at all."
 "Very important"

I'm going to list some scientific concepts. For each one, please tell me how many of your students—all, most, about half, only a few, or none—you expect will understand the concept by the end of the current school year.

| | All | Most | About half | Only a few | None | Don't Know | Refused |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|------------|------------|------|------------|---------|
| How traits such as eye and hair color are passed from one generation to the next | 22% | 37% | 12% | 7% | 18% | 4% | 2% |
| The theories of natural selection and evolution | 8 | 34 | 18 | 16 | 19 | 5 | 2 |
| How plants and animals get their energy from food | 28 | 38 | 12 | 3 | 14 | 5 | 2 |
| The general form, location and function of the major organ systems of the human body | 13 | 38 | 13 | 8 | 20 | 6 | 3 |
| How electrical charges interact and some of the important consequences of such interactions | 13 | 29 | 26 | 15 | 13 | 3 | 3 |
| The properties and speeds of sound and light waves | 11 | 27 | 24 | 20 | 14 | 3 | 2 |
| The structure of a molecule | 30 | 38 | 16 | 7 | 6 | 3 | 2 |
| Chemical bonds, chemical reactions and the formation of chemical compounds | 16 | 32 | 21 | 20 | 9 | 2 | 2 |
| The differences between acids and bases. | 21 | 30 | 19 | 15 | 12 | 3 | 2 |
| The Big Bang and the history and form of our universe and solar system | 19 | 37 | 18 | 13 | 11 | 3 | 2 |
| How the Earth's surface is made up of moving plates, what drives their motion, and the consequences—such as earthquakes and volcanic eruptions—of that motion | 33 | 37 | 10 | 6 | 11 | 3 | 2 |
| Newton's Law of Universal Gravitation | 27 | 38 | 21 | 6 | 7 | 1 | 1 |

These low expectation levels cannot be explained simply by the difficulty in grasping complex scientific theories. We also asked teachers to tell us how many of their students they thought would be familiar with the major contributions five famous scientists have made by the end of the year. Some of the names chosen—Sir Isaac Newton, Albert Einstein, and Charles Darwin—are among the most famous scientists of all time, people whose fame and accomplishments are part of common culture. As the graph opposite demonstrates, these expectations are also low.

"I'm going to read you a list of famous scientists. Please tell me how many of your students—all, most, about half, only a few, or none—will be familiar with their major contributions to science by the end of the current school year."



There is, logically, a correlation between the results for the two scientists whose accomplishments were also queried about—Newton and his law of gravity, and Darwin and evolution - and the results for the specific accomplishments. 76% of eighth grade science teachers thought all or most of their students would be familiar with Newton, while 68% thought all or most would be familiar with his Universal Law of Gravity. Only 40% thought all or most of their students would be familiar with Charles Darwin, and only 42% thought all or most would be familiar with the theory of evolution.

History Expectations

Although a basic knowledge of history requires some familiarity with important facts, names, key events and dates, many eighth grade history teachers emphasize an altogether different set of skills. Perhaps because of this emphasis, students are apt to emerge from eighth grade with clear gaps in their historical knowledge.

According to their teachers, eighth graders are much likelier to know about America's 18th and 19th Century history than they are to know about the 20th. On the high end, 77% of eighth grade history teachers expect that all or most of their students will know that Bunker Hill, Saratoga, and Yorktown were major Revolutionary War battles and 70% believe all or most of their students will know when the Civil War was fought. Even these results, however, show that significant numbers of American students will not know some basic historical facts.

Expectations were much lower for other important facts. 52% of eighth grade history teachers expect that all or most of their students will know that the transcontinental railroad was largely built by immigrants. Only 34% of teachers expect that all or most of their students will know about the Monroe Doctrine, and only 38% believe all or most of their students will know about the Federalist Papers.

Student knowledge of the 20th Century is uneven, according to teachers. 77% of eighth grade history teachers expect all or most of their students will know that Rev. Martin Luther King gave the "I have a dream speech": only 9% think none of their class will know this. 66% believe that all or most of their students will know that women won the right to vote in the 20th Century; only 12% believe that none of their students will know this.

Thinking about specific events in U.S. history, please estimate how many of your students—all, most, about half, only a few, or none—will know about each of the events or facts listed below by the end of the current school year?

| | All | Most | About half | Only a few | None | Don't Know | Refused |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|------------|------------|------|------------|---------|
| That the Civil War was fought between 1861 and 1865 | 30% | 40% | 17% | 5% | 3% | 6% | 1% |
| That the term Reconstruction refers to the readmission of the Confederate states and the protection of the rights of black citizens | 21 | 40 | 15 | 11 | 9 | 6 | 0 |
| That the Federalist Papers were written to gain ratification of the U.S. Constitution | 14 | 24 | 26 | 23 | 9 | 5 | 0 |
| That Bunker Hill, Saratoga and Yorktown were important battles fought during the Revolutionary War | 21 | 46 | 15 | 12 | 3 | 5 | 1 |
| That the Monroe Doctrine declared that Europe should not acquire new territories in the Western Hemisphere | 13 | 32 | 22 | 22 | 7 | 5 | 0 |
| That the New Deal was Franklin Delano Roosevelt's program to lift the country out of the Great Depression | 10 | 17 | 9 | 10 | 49 | 6 | 1 |
| That Theodore Roosevelt was President when the Panama Canal Zone was acquired | 10 | 12 | 10 | 22 | 42 | 6 | 0 |
| That the Progressive Era resulted in reforms like government regulation of trusts and monopolies, the direct election of Senators and the income tax | 8 | 13 | 10 | 21 | 44 | 6 | 0 |
| That Martin Luther King gave the famous "I have a dream" speech in favor of civil rights | 45 | 32 | 6 | 3 | 9 | 5 | 1 |
| That the transcontinental railroad was built largely by immigrants | 17 | 35 | 19 | 11 | 14 | 6 | 0 |
| That women won the right to vote in the early 20th Century | 27 | 39 | 10 | 8 | 12 | 5 | 2 |

However, only 27% thought that all or most of their students would know that the New Deal was F.D.R.'s program to combat the Great Depression; 49% thought that none of their students would know this. Only 22% thought that all or most of their students would know Theodore Roosevelt was President when the Panama Canal Zone was acquired; 42% thought none of their students would know this. And only 21% expect all or most of their students would know that the Progressive Era resulted in important government reforms like the income tax; 44% thought none of their students would know this. These results suggest that eighth graders are receiving an incomplete overview of this century's important history.

MULTI-CULTURALIST APPROACHES TO TEACHING

When teaching eighth grade students in particular, teachers may have numerous opportunities to adopt and implement "multi-culturalist" approaches to teaching—i.e. approaches that tend to emphasize how so many different races and ethnicities have contributed to the American "way of life." Some reformers argue that multi-culturalist teaching strategies contribute to a well balanced education; others counter that undue emphasis on such multi-culturalist issues tends to detract from the teaching of basic skills and knowledge that may or may not be influenced by those perspectives.

Certainly these multi-culturalist perspectives have influenced the way that eighth grade students learn about literature in English classes. Rather than simply teaching the classics in a traditional format, many teachers today strive to help students apply the literature to their own experiences, as well as to real world problems. More eighth grade English teachers (46%) indicated that they think it is more important for students to use their personal experience to interpret what they read, than it is to help them understand and explain what the author is saying in his own terms (41%). And the vast majority of eighth grade teachers surveyed (96%) think it is either somewhat or very important for students to discuss how the things they read apply to contemporary social issues.

Scientific principles are also increasingly taught through the prism of global perspectives. Although 69% of the eighth grade science teachers indicated that their primary interest was in having students understand fundamental scientific principles and processes, fully 23% maintained that their primary interest was to emphasize the role science plays in contemporary political debates.

Finally, barely 6 in 10 of the eighth grade history teachers surveyed (61%) accept as closer to their own the understanding that American civilization is based principally on the legacy of Western civilization; by contrast, more than one third (36%) believe American civilization actually represents a fusion of Western, African, and Native American cultures to form "a unique cultural blend." How the latter belief manifests itself in the classroom, of course, remains to be seen.

TEACHER PERSPECTIVES ON CURRENT ISSUES IN EDUCATION POLICY

Today's teachers work on the front line in helping to educate our nation's youth. Their experiences working with students from all backgrounds makes them an invaluable source of potential information for educational reformers wrestling with current problems of our nation's educational systems. Too often their critical perspectives are overlooked. Thus in this study, the Manhattan Institute sought to solicit teacher opinions concerning many of the important educational debates currently being waged today.

Teacher Control over Curricula, Methods, and Standards

Ever since public education was first introduced in the United States, teachers and school officials have battled over who should determine what methods of teaching should be employed, and what subjects should be a part of the school-age curriculum.

As it stands today, fourth grade teachers perceive that they have little control in determining the topics and themes covered in their classes, at least in comparison to the perceptions eighth grade teachers have about their own level of control. On a scale from 0 (no control) to 10 (complete control), 47% of the fourth grade teachers surveyed rated their level of control at 5 or less, compared to just 37% of eighth grade teachers who rated their level of control in the same way. Teachers at urban schools were especially despondent about the degree to which they control such matters, with exactly 6 in 10 rating their level of control over topics and themes as 5 or less, compared to just 40% of the teachers at rural schools.

Certainly teacher control over themes and topics may be influenced heavily by the nature of the subject being taught, especially with regard to eighth grade classrooms. Nearly half of the eighth grade math teachers (48%) and science teachers (49%) rated their level of control over topics and themes covered in class at 5 or less (out of 10), providing a clear indication that those groups perceive school officials enjoy considerable control over such matters. By contrast, just one third of eighth grade history teachers (33%) and just 17% of eighth grade English teachers felt the same way. In fact, an overwhelming majority (80%) of eighth grade history teachers rated their level of control over topics and themes at 6 or higher (Indeed, one quarter of the history teachers rated their level of control as "complete").

By way of comparison, teachers across the board perceive they have much greater control in determining the teaching methods they use during the school year. Fully, 94% of fourth grade teachers and 96% of eighth grade teachers rated the level of control they have over methods as 6 or greater (out of 10). Nearly 6 in 10 (58%) of the eighth grade teachers surveyed and nearly half (48%) of fourth grade teachers believe they have "complete control" over the teaching methods they use.

Interestingly, teachers across the board say they are satisfied with their state's academic standards. In all, 80% of fourth grade teachers and 77% of eighth grade teachers agree that the academic standards for students in their respective states are generally consistent with the educational goals, content and standards that they believe are desirable. 4 in 10 teachers across the board strongly agree that statewide standards are consistent with their own goals.

Still, such general acceptance of statewide or community standards does not always translate into a willingness on the part of teachers to jettison their own relativistic approach to teaching from the educational process. Less than 7 in 10 teachers surveyed agreed that a teacher's role is to help students learn the things that the state or community has decided students should know, a lower percentage than was indicated by those who praised those same standards.

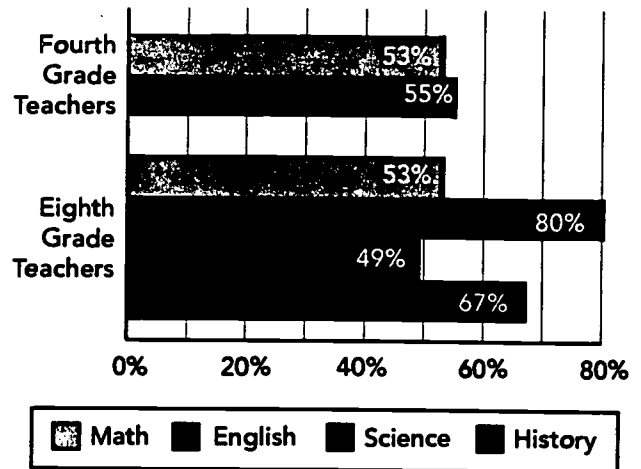
The Role of Parents in the Educational Process

Today's teachers increasingly look elsewhere—particularly to parents—for critical support in the effective education of students. Among teachers themselves, parental involvement is perceived as having many advantages and few downsides. In all, 81% of fourth grade teachers and 74% of eighth grade teachers said that on average, parents are an asset to them as teachers. Indeed, parents are welcome by most every subset of teachers surveyed.

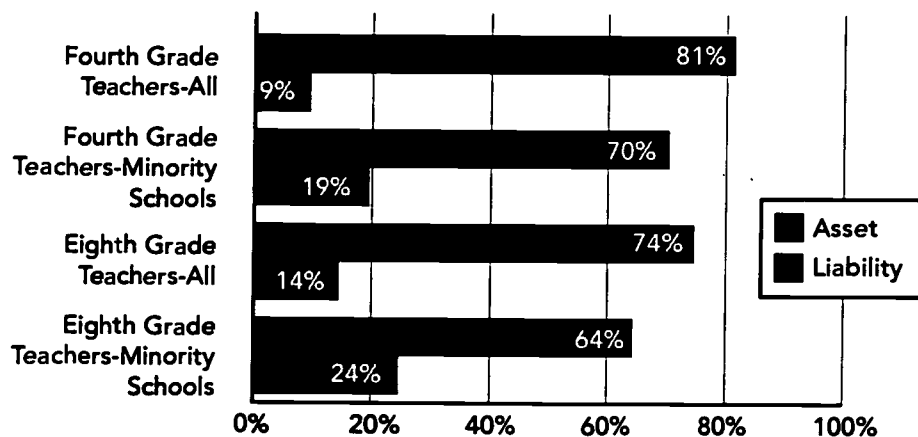
Among fourth grade teachers, for example, approximately 9 in 10 teachers from suburban schools (89%), and from schools drawing on middle incomes populations (90%) or high-income populations (93%) felt that parents were an asset to the process. Fourth grade teachers from schools drawing primarily on minority populations felt less strongly, but still 70% of that group said parents were an asset. The same patterns occurred among eighth grade teachers. Teachers from suburban schools (79%) and rural schools (76%) felt

**"How much control would you say you have in determining the topics and themes you will cover in class during the school year?"
(0 means no control and 10 means complete control)**

Percentage rating their level of control at 6 higher



"Would you say on average the parents of your students are an asset or a liability?" (Question 7A only)

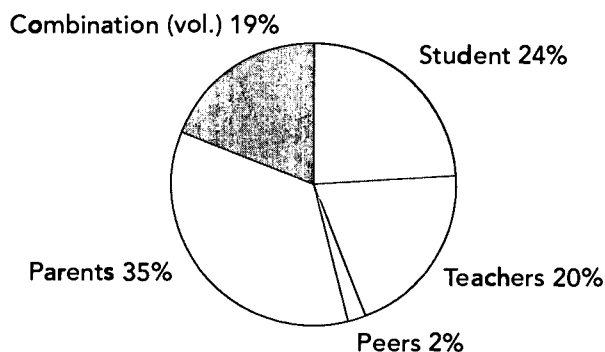


more strongly than teachers from urban schools (63%) that parents were an asset. Almost two-thirds (64%) of eighth grade teachers from predominantly minority schools felt that way, a drop of more than 10 percent.

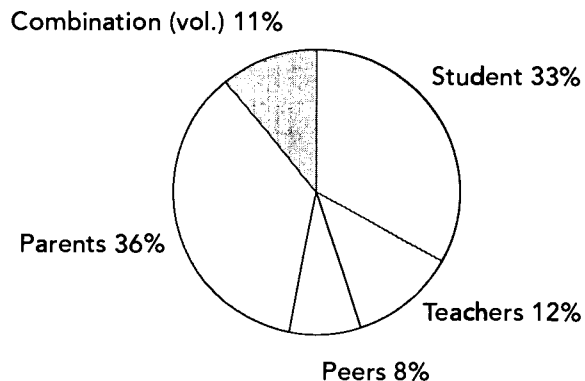
Not only do all these groups consider parents an asset, but many of the teachers surveyed considered them the single greatest factor in determining student achievement. From a list that included the student, teachers, peers and parents, 35% of fourth grade teachers and 36% of eighth grade teachers named parents as having the greatest effect on a student's level of achievement in school, tops in each case. (19% of fourth grade teachers and 11% of eighth grade teachers volunteered that it was in fact a combination of influences that prevailed).

"Who has the greatest effect on a student's level of achievement in school generally—the student, the student's teachers, the student's peers, or the student's parents?"

Fourth Grade Teachers



Eighth Grade Teachers



Social Promotion

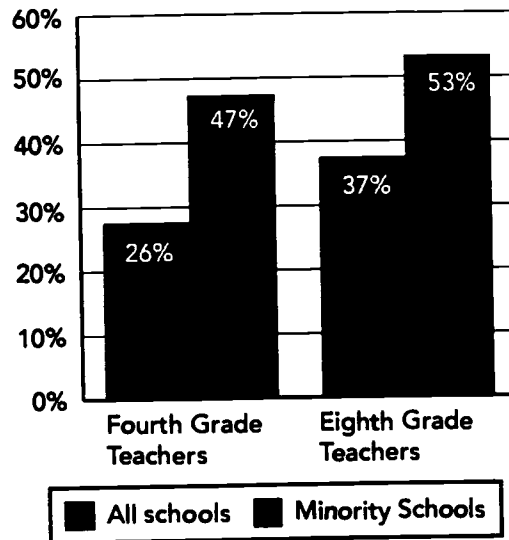
Parents have been especially influential in encouraging another development in recent years: the social promotion of students who are academically failing. But if parents and administrators are sometimes likely to favor moving students from grade to grade in order to keep them with others in their own age group, teachers remain overwhelmingly hostile to the development. In all, 57% of fourth grade teachers and 61% of eighth grade teachers favor ending social promotion in their schools, even if that means significantly more students will be held back. (By contrast, approximately one-fifth of both groups oppose such a change). Fourth grade teachers from urban schools (71%) and lower income schools (69%) are especially likely to favor ending the practice of social promotion. (Indeed, only 15% of fourth grade teachers from those two groups oppose bringing an end to the practice).

The above-mentioned groups' more vehement opposition to social promotion is interesting given the impact that economic conditions outside of school (often worse in urban and lower income neighborhoods) often have on the learning capacity of students. Overall, 26% of fourth grade teachers and an amazing 37% of eighth grade teachers believe that at least half of their students do not learn what they should in school because of the economic conditions surrounding them. Fourth grade teachers at lower income schools (54%) appear even more certain that at least half of their students are also affected in the same manner.

Finally, the impact of economic conditions on classrooms in predominantly minority neighborhoods cannot be understated. In all, 47% of fourth grade teachers at minority schools and 53% of eighth grade teachers at minority schools report that at least half of their students have been affected by economic conditions outside the schools.

"How many of your students would you say DO NOT learn what they should in school because of social or economic conditions outside of school?"

Combined percentage of teachers who answered "about half," "most" or "all."

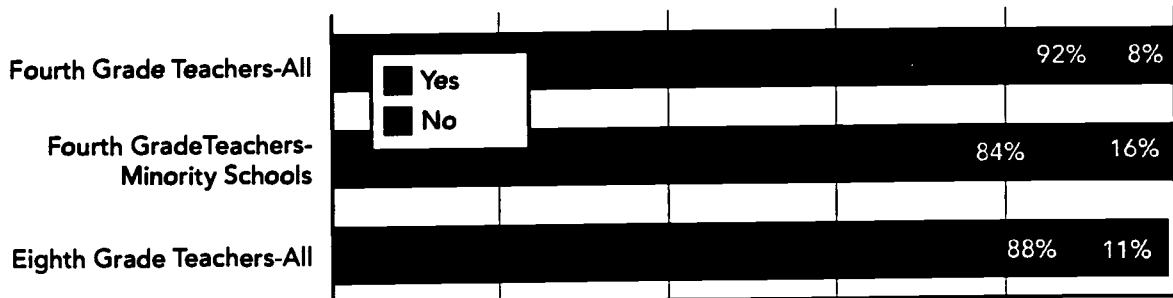


School Discipline

A final issue in educational reform considered by the current study is school discipline. Regardless of grade level, most teachers believe that their ability to control unruly behavior in the classroom is essential. Specifically, 46% of fourth grade teachers and 41% of eighth grade teachers estimated that disruptive students who require disciplinary attention either "sometimes" or "always" causes student learning to suffer. Among fourth grade instructors, those from predominantly minority schools (58%) are especially likely to experience such disruptions at least some of the time. Among eighth grade teachers, those from minority schools (51%), urban schools (58%) and lower-income schools (55%) are all more likely to complain that such disruptions occur either "sometimes" or "always."

Do school policies play a role in maintaining classroom order? If they do, that role is mostly a positive one. An overwhelming 92% of fourth grade teachers and 88% of eighth grade teachers think that their school's policies give them enough authority to effectively maintain order in the classroom. Only 8% and 11% of those groups, respectively, disagreed with that finding. Although such a feeling among teachers is apparently widespread, some mild dissent from this view is indicated within certain subgroups. For example, twice as many fourth grade teachers from minority schools (16%) and from lower-income schools (17%) disagreed that their schools' policies gave enough authority, as compared to the percentage of fourth grade teachers overall who said the same.

"Does your school's policy give you enough authority to effectively keep order in your classroom?"



APPENDIX A: PROFILE OF TEACHERS AND RESPECTIVE SCHOOLS

SCHOOL PROFILE (expressed in percentages)

| | Fourth Grade Teachers | | | Eighth Grade Teachers | | | | |
|-----------------------------------------|-----------------------|------|---------|-----------------------|------|---------|---------|---------|
| | Total | Math | English | Total | Math | English | Science | History |
| Community Socio-Economic Status | | | | | | | | |
| High income and education | 14% | 15% | 15% | 12% | 13% | 10% | 12% | 12% |
| Middle income and education | 50 | 50 | 49 | 55 | 51 | 56 | 54 | 57 |
| Low income and education | 34 | 34 | 34 | 31 | 32 | 31 | 32 | 28 |
| Percentage Minority Composition | | | | | | | | |
| 0-15% | 57 | 58 | 57 | 52 | 49 | 57 | 50 | 50 |
| 16-30% | 16 | 15 | 16 | 17 | 20 | 14 | 19 | 19 |
| 31-50% | 26 | 25 | 25 | 31 | 30 | 30 | 32 | 31 |
| Minority Enrollment * | | | | | | | | |
| African-American | 48 | | | 45 | | | | |
| Hispanic | 41 | | | 44 | | | | |
| Asian | 7 | | | 8 | | | | |
| American Indian | 3 | | | 1 | | | | |
| Years Teaching At Current School | | | | | | | | |
| 1-10 years | 49 | 49 | 49 | 51 | 53 | 54 | 54 | 43 |
| 11-20 years | 32 | 32 | 32 | 29 | 30 | 30 | 27 | 31 |
| 21-30 years | 15 | 15 | 14 | 14 | 13 | 12 | 16 | 16 |
| 31 or more years | 4 | 4 | 4 | 6 | 5 | 4 | 4 | 10 |

*Minority enrollment in schools with 26% or more minority students.

TEACHER PROFILE (expressed in percentages)

| | Fourth Grade Teachers | | | Eighth Grade Teachers | | | | |
|--------------------------------|-----------------------|------|---------|-----------------------|------|---------|---------|---------|
| | Total | Math | English | Total | Math | English | Science | History |
| Highest Degree Attained | | | | | | | | |
| Bachelors | 45% | 46% | 45% | 37% | 40% | 37% | 37% | 35% |
| Masters | 55 | 54 | 55 | 62 | 60 | 61 | 62 | 62 |
| Doctorate | - | - | - | 1 | - | 1 | 1 | 1 |
| Total Years Teaching | | | | | | | | |
| 1-10 years | 24 | 24 | 23 | 28 | 29 | 31 | 27 | 25 |
| 11-20 years | 33 | 34 | 33 | 29 | 28 | 26 | 33 | 25 |
| 21-30 years | 33 | 33 | 34 | 31 | 32 | 32 | 31 | 33 |
| 31 or more years | 10 | 10 | 10 | 12 | 11 | 10 | 9 | 17 |
| Age | | | | | | | | |
| 35 and under | 11 | 12 | 11 | 15 | 17 | 17 | 12 | 13 |
| 36-40 | 8 | 8 | 8 | 10 | 12 | 8 | 9 | 7 |
| 41-45 | 12 | 13 | 11 | 12 | 12 | 12 | 15 | 11 |
| 46-50 | 24 | 24 | 25 | 19 | 22 | 14 | 21 | 19 |
| 51-55 | 29 | 29 | 30 | 26 | 24 | 28 | 28 | 28 |
| 56+ | 15 | 14 | 15 | 18 | 14 | 21 | 15 | 21 |

APPENDIX B: METHODOLOGY

In order to better understand the methods teachers deploy in the classroom, The Manhattan Institute commissioned two surveys of teachers throughout the United States. The questionnaire was developed jointly by Henry Olsen at the Manhattan Institute and Christopher Barnes from the University of Connecticut, with assistance from Chester E. Finn, Jr. of the Hoover Institution and the Thomas B. Fordham Foundation, Mary Beth Klee of K12 Inc. (history questions), Lawrence S. Lerner of the California State University, Long Beach (science questions), Ralph Raimi of the University of Rochester (math questions), and Sandra Stotsky of the Massachusetts Department of Education (English questions).

Interviews were conducted by The Center for Survey Research in Storrs, Connecticut, using a Computer Assisted Telephone (CATI) system. Professional survey interviewers trained in standard protocols for administering survey instruments conduct all CSRA surveys. Interviewers assigned to this survey participated in special training conducted by senior project staff. The draft survey questionnaire and field protocols received thorough testing prior to the start of the formal interviewing period. Interviews were extensively monitored to ensure CSRA standards for quality were continually met.

Fourth Grade Survey

The fourth grade survey was conducted January 18 through February 2, 2002. A total of 403 interviews were conducted with fourth grade teachers who taught math or English. In the case of fourth grade, most teachers taught both subjects; therefore they were randomly assigned to a subject area. Among those surveyed, 91% teach math and 93% teach English.

| | <u>Section Completes</u> | <u>Subject Overlap</u> |
|---------|--------------------------|------------------------|
| Math | 203 | 365 |
| English | 200 | 375 |

The sample frame for this survey consists of all fourth grade teachers listed in a proprietary database of known schoolteachers. Survey Sampling, Inc., of Fairfield, Connecticut, provided the sample. Schoolteachers were randomly selected from the database for the survey. All sampled teachers received short screening interviews to determine eligibility for the survey. The sample error associated with a survey of this size is +/- 5%, meaning that there is less than one chance in twenty that the results of a survey of this size would differ by more than 5% in either direction from the results which would be obtained if all members of the sample frame had been selected. The sample error is larger for sub-groups. CSRA also attempted to minimize other possible sources of error in this survey.

Eighth Grade Survey

The eighth grade survey was conducted January 26, 2002 through February 9, 2002. A total of 806 interviews were conducted. Teachers were asked if they taught in a specific subject area: math, science, history / social studies and English. If a teacher taught in more than one area they were randomly assigned to a subject areas. Teachers who did not teach in any of these subjects were terminated.

| | <u>Section Completes</u> | <u>Subject Overlap</u> |
|------------------------|--------------------------|------------------------|
| Math | 200 | 228 |
| English | 206 | 224 |
| Science | 200 | 212 |
| History/Social Studies | 200 | 223 |

The sample frame for this survey consists of all eighth grade teachers listed in a proprietary database of known schoolteachers. Survey Sampling, Inc., of Fairfield, Connecticut, provided the sample. Schoolteachers were randomly selected from the database for the survey. All sampled teachers received short screening interviews to determine eligibility for the survey. The sample error associated with a survey of this size is +/- 3%, meaning that there is less than one chance in twenty that the results of a survey of this size would differ by more than 3% in either direction from the results which would be obtained if all members of the sample frame had been selected. The sample error is larger for sub-groups. CSRA also attempted to minimize other possible sources of error in this survey.

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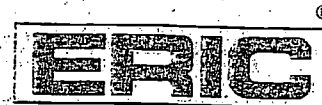
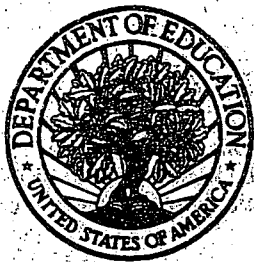
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