



**YALE-NEW HAVEN
TEACHERS INSTITUTE**

Annual Report

2004

Yale-New Haven
Teachers Institute

Annual Report

2004

The Yale-New Haven Teachers Institute is an educational partnership between Yale University and the New Haven Public Schools designed to strengthen teaching and learning in local schools and, by example, in schools across the country. Through the Institute, Yale faculty members and school teachers work together in a collegial relationship. The Institute is also an inter-school and interdisciplinary forum for teachers to collaborate on new curricula. Each participating teacher becomes an Institute Fellow and prepares a curriculum unit to be taught the following year. Teachers have primary responsibility for identifying the subjects the Institute addresses.

Since its inception in 1978, the Institute has been recognized repeatedly as a pioneering and successful model of university-school collaboration; in 1990 it became the first program of its type to be permanently established as a function of a university. In 1998 the Institute launched a National Demonstration Project to show that the approach it had taken for twenty years in New Haven could be tailored to establish similar university-school partnerships under different circumstances in other cities. Based on the success of that Project, in 2004 it announced the Yale National Initiative to strengthen teaching in public schools, a long-term endeavor to establish exemplary Teachers Institutes in states throughout the country.

For information about the Institute model, the National Initiative, or opportunities to support the Institute's Endowment, please contact:

James R. Vivian
Director, Yale-New Haven Teachers Institute
P.O. Box 203563 Yale Station
Yale University
New Haven, Connecticut 06520-3563
phone: (203) 432-1080
fax: (203) 432-1084
electronic mail: ynhti@yale.edu
Web sites: <http://www.yale.edu/ynhti>
<http://teachers.yale.edu>

Contents

Highlights of the Report.....	1
Introduction.....	1
The Program in New Haven.....	4
The Institute Web sites.....	4
Financial Plans.....	4
 The Program in New Haven.....	5
The Seminars and Curriculum Units.....	5
The Supreme Court in American Political History.....	5
Children's Literature, from Infancy to Adolescence.....	7
Representations of American Culture, 1760-1960:	
Art and Literature.....	9
Energy, Engines, and the Environment.....	11
Keeping the Meaning in Mathematics:	
The Craft of Word Problems.....	13
The Process of Determining the Seminar Topics.....	15
The Fellows' Application and Admissions Process.....	16
The Fellows Who Were Accepted.....	22
Activities for Fellows.....	26
Rewards for Fellows.....	33
Relating Seminar Topics to Curriculum Units.....	39
Results for the Participants.....	41
First- and Second-Year Teachers.....	45
Teams of Fellows.....	53
Benefits for Students.....	54
Participants' Conclusions Overall.....	59
Electronic Resources and Assistance.....	61
Institute Centers for Curriculum and Professional Development.....	64
Preparation for the Program in 2005.....	67
Local Program Documentation and Evaluation.....	69
The Institute Web sites.....	71
Local Advisory Groups.....	77
Steering Committee.....	77
University Advisory Council.....	79
 Financial Plans.....	86
 Conclusion.....	88

Appendix

Committees, Councils, and Boards of the Institute

Fellows and Seminar Leaders of the Yale-New Haven Teachers Institute,
1978-2004

Selected Bibliography

HIGHLIGHTS OF THE REPORT

Introduction

During 2004 the Yale-New Haven Teachers Institute continued its New Haven program for the twenty-seventh year and embarked on the Yale National Initiative to strengthen teaching in public schools, a long-term effort to establish up to 45 new Teachers Institutes throughout the United States.

From its beginning in 1978, the overall purpose of the Yale-New Haven Teachers Institute has been to strengthen teaching and learning in local schools and, by example, in schools across the country. New Haven represents a microcosm of urban public education in the United States. Eighty-eight percent of the students in the New Haven Public Schools are African American or Hispanic, and 71 percent of the district's students are eligible for the free or reduced-price lunch program. The Institute places equal emphasis on teachers' increasing their knowledge of a subject and on their developing teaching strategies that will be effective with their students.

At the core of the program is a series of seminars on subjects in the humanities and the sciences. Topics are suggested by the teachers based on what they think could enrich their classroom instruction. In the seminars, Yale

faculty contribute their knowledge of a subject, while the New Haven teachers contribute their expertise in elementary and secondary school pedagogy, their understanding of the students they teach, and their grasp of what works in the crucible of the classroom. Successful completion of a seminar requires that, with guidance from the Yale faculty member, the teachers each write a curriculum unit to be used in their own classroom and to be shared with others. The units are disseminated throughout New Haven schools and, in certain schools, through Institute Centers for Curriculum and Professional Development. Both print and electronic publication make them available for use or adaptation by other teachers in New Haven, and by teachers, students, and the wider public throughout this nation and indeed the world.

Teachers are treated as colleagues throughout the seminar process. Unlike conventional university or professional development courses, Institute seminars involve at their very center an exchange of ideas among teachers and Yale faculty members. This is noteworthy since the teachers admitted to seminars are not a highly selective group, but rather a cross-section of teachers in the system, most of whom, like their urban counterparts across the country, did not major in one or more of the subjects they teach. The Institute's approach assumes that urban public school teachers can engage in serious study of the field and can devise appropriate and effective curricula based on this study.

Through 2004, the Yale-New Haven Teachers Institute has offered 165 different seminars to 580 individual teachers, many of whom have participated for more than one year. (Please see Appendix for a list of the Fellows.) The seminars, meeting over a five-month period, combine the reading and discussion of selected texts (and often the study of selected objects and aspects of the local environment) with the writing of the curriculum units. Thus far, the teachers have created 1488 curriculum units. Over the years, a total of 86 Yale faculty members have participated in the Institute by giving one or more seminars. (Please see Appendix.) Of them, 59 have also given talks. Forty other Yale faculty members have also given talks. At this date about half of these 126 participants are current or recently retired members of the faculty.

The Institute's twentieth year, 1997, had brought to a climax a period of intensive development of the local program. That had included placing all Institute resources on-line, providing computer assistance to the Fellows, correlating Institute-developed curriculum units with new school-district academic standards, establishing Institute Centers for Curriculum and Professional Development in the schools, and establishing summer Academies for New Haven students. In that year, while continuing to deepen its work in New Haven, the Institute began a major effort to demonstrate the efficacy of its approach in other cities across the country.

This effort involved in 1998 the planning stage of a National Demonstration Project. In 1999 partnerships were established between col-

leges or universities and school districts at four sites that planned to tailor the Institute's approach to local needs and resources. Implementation grants were awarded to four new Teachers Institutes — in Pittsburgh (Chatham College and Carnegie Mellon University), Houston (University of Houston), Albuquerque (University of New Mexico), and Santa Ana (University of California at Irvine). These grants enabled them to work with the Yale-New Haven Teachers Institute for a period of three years, from 1999 through 2001.

In 2002-03 the Institute's work on the national level was notably assisted by an extension of the support for the National Demonstration Project by the Wallace Foundation and a grant for 2002-2003 by the Jessie Ball duPont Fund. This support enabled the two-year Preparation Phase of the Yale National Initiative to be brought to completion. The Preparation Phase included Research and Planning Grants for the Pittsburgh Teachers Institute and the Houston Teachers Institute, which have significantly contributed to the evaluation of the Teachers Institute approach. The Preparation Phase enabled the Yale-New Haven Teachers Institute to collate and analyze data from the questionnaires and surveys conducted during the National Demonstration Project, establish a Web site for the Yale National Initiative, and prepare the "Understandings" and "Necessary Procedures" that serve as basis for membership in a new League of Teachers Institutes. The Preparation Phase made possible a summary evaluation of the National Demonstration Project by Rogers M. Smith and other researchers at the University of Pennsylvania, and culminated in 2004 with the announcement of the Yale National Initiative to strengthen teaching in public schools in states throughout the country.

Also in 2004 United States Senators Joseph Lieberman and Christopher Dodd of Connecticut and Congresswoman Rosa DeLauro of New Haven first introduced in the Congress the Teacher Professional Development Institutes Act. This legislation, which complements the No Child Left Behind Act's provisions for teacher quality, would make possible, as part of the reauthorization of the Higher Education Act, the establishment and sustaining over five years of as many as 40 additional Teachers Institutes in states throughout the country. These Institutes would be modeled on the Yale-New Haven Teachers Institute. Passage of this legislation would provide a tremendous boost to the Yale Initiative.

This report discusses the two complementary areas of activity undertaken by the Yale-New Haven Teachers Institute in 2004. During the year the Institute published a new booklet containing the Steps, Understandings and Necessary Procedures for establishing a Teachers Institute. This booklet, and considerable other material on the National Initiative, were made available on a new Initiative Web site, also developed and made public during 2004.

The Program in New Haven

This section of the report covers the offerings, organization, and operation of the Institute's 2004 program for the New Haven teachers who participated as Fellows. It draws extensively upon the evaluations written by Fellows and seminar leaders at the conclusion of their participation. The report here documents teacher interest in Institute seminars, as well as the content of the seminars that have been offered, the application and admissions process, the participants' experience in the program, and the preparation for 2005 offerings. With respect to program development, it describes the maintaining of Institute Centers for Curriculum and Professional Development in the schools, and the involvement of new teachers as Fellows. It sets forth the structure and activities of the local advisory groups; and it outlines the process of local documentation and evaluation.

We hope that this section of the report will be of interest to all those who assist in supporting, maintaining, and expanding the program in New Haven. We hope that its account of our local procedures may continue to prove useful to those who have established new Teachers Institutes, and to those at other sites who are contemplating the establishment of such Institutes.

The Institute Web Sites

The Web site of the Yale-New Haven Teachers Institute makes available electronic versions of the Institute's publications — including the volumes of curriculum units and essays and other materials concerning the Institute's work. (The address is <http://www.yale.edu/ynhti/>.) The Web site is important for New Haven teachers; it played a key role during the National Demonstration Project; and that role has grown as the Yale National Initiative proceeds. The Web location has been advertised prominently on the cover of *On Common Ground*, which contains articles regarding school-university partnerships and is intended for a national audience.

The Web site of the Yale-New Haven Teachers Institute may also now be accessed through the Web site of the Yale National Initiative, the address for which is <http://teachers.yale.edu>. The National Web site contains publications, video programs, news and other information about the Initiative and the League of Teachers Institutes, as well as links to Institutes in other cities and curricular resources from seminars in those cities in addition to New Haven.

Financial Plans

A final section of the report sets forth the current financial planning with respect to both the New Haven program and the next phases of the Yale National Initiative.

THE PROGRAM IN NEW HAVEN

The Seminars and Curriculum Units

From its inception, a tenet of the Institute's approach has been to determine its offerings annually in response to the needs for further preparation and curriculum development that the teachers themselves identify. In 2004 this process, as described later in the report, resulted in the presentation of five seminars, three in the humanities and two in the sciences.

The seminars were assisted by a contribution from the New Haven Public Schools. With major support from endowment revenues the Institute offered the following three seminars in the humanities:

"The Supreme Court in American Political History,"
led by Robert A. Burt, Alexander M. Bickel Professor of Law

"Children's Literature, from Infancy to Adolescence,"
led by Paul H. Fry, William Lampson Professor of English

"Representations of American Culture, 1760-1960: Art and Literature,"
led by Alexander Nemerov, Professor of History of Art and of American Studies

With support from the Sherman Fairchild Foundation and funds from the Howard Hughes Medical Institute grant to Yale the Institute offered the following two seminars in the sciences and mathematics:

"Energy, Engines, and the Environment,"
led by Alessandro Gomez, Professor of Mechanical Engineering

"Keeping the Meaning in Mathematics: The Craft of Word Problems,"
led by Roger E. Howe, William R. Kenan Jr. Professor of Mathematics

The following overview of the work in the seminars is based on the descriptions circulated in advance by the seminar leaders, the *Guide to Curriculum Units, 2004*, and the curriculum units themselves. Each Fellow has prepared a curriculum unit that she or he will use in a specific classroom. Each Fellow also has been asked to indicate the subjects and grade levels for which other teachers might find the curriculum unit to be appropriate.

The Supreme Court in American Political History

This seminar's premise was that while the Supreme Court has played a significant role in American political history, there is considerable dispute about its rulings' actual practical effects, about their desirability, and about their democratic legitimacy. The seminar examined landmark Court decisions over the

*A tenet of the
Institute's approach
has been to determine
its offerings annually
in response to the
needs teachers them-
selves identify.*

past two centuries. Participants considered *Marbury v. Madison* (1803), the foundational ruling for judicial authority; *Dred Scott v. Sandford* (1857), which attempted to rebuff Northern attacks on slavery and, many would say, helped to provoke the Civil War; *Brown v. Board of Education* (1954), which overturned state-sponsored race discrimination and, many would say, precipitated the modern Civil Rights movement; *Roe v. Wade* (1973), which invalidated state abortion restrictions and fueled a continuing national political and social controversy; *Bush v. Gore* (2000), which memorably decided that year's Presidential election; *Grutter v. Bollinger* (2003), which upheld race-based affirmative action admissions policy in universities; and *Lawrence v. Texas* (2003), which overturned state laws criminalizing consensual homosexual relations.

The curriculum units prepared by the Fellows address specific aspects of the Supreme Court's work. A number of the units directly deal with cases discussed. John Buell explores the legal and political issues behind *Dred Scott*, the legal arguments of the case and the public response, for his history students at the high school level. Sharron Solomon-McCarthy, a middle school teacher, examines child labor leading up to *Hammer v. Dagenhart* and related cases. Other units focus on some other specific area of the Court's work. Peter Herndon addresses separation of church and state in a unit for middle or high school students in United States history, government or civics classes. Another high school teacher of history, Joan Rapczynski, examines the Warren Court generally. Joanne Pompano, a teacher of blind and visually impaired students, considers disability rights and the Court. Joanna Ali, who teaches science to high schoolers, explores reproductive rights, specifically as applied to the

The seminar examined landmark Court decisions over the past two centuries.



Michael Marsland

The seminar on "The Supreme Court in American Political History." (Left to right: Fellows Rebecca S. Gratz, John B. Buell, Mnikesa Whitaker, and Thomas C. Leaf; and seminar leader Robert A. Burt.)

human cloning controversy. A teacher of high school English, Thomas Leaf weighs free speech issues in public schools. Finally, two of the units address more general themes that apply to the entire range of the Court's work in American democracy. Priscilla Luoma, another high school teacher of English, probes the cultural significance of the Constitution as an expression of the ideal relationship between the individual and society. And an English teacher at the middle school level, Mnikesa Whitaker, applies the language of Supreme Court opinions as a window on shifting political imagery, with specific reference to the historical evolution of the social status of African Americans.

According to the seminar leader, "All of the units provide a rich perspective on the basic underlying question that we considered in our seminar discussions — that is, the actual practical effects of Supreme Court rulings, the desirability of any such effects and the legitimacy of the Court's claim to authority in resolving these intensely disputed issues."

Children's Literature, from Infancy to Adolescence

Participants in this seminar read Ann Petry and Mildred Taylor titles, together with Sandra Cisneros and Tony Johnston among recent authors; but for the most part they read a sampling of British and French as well as American "classics" for all ages, including the very young. Selections included *Little Women*, *Alice in Wonderland*, and traditional fairy tales and folk tales by Grimm, Andersen, Perrault, and others. The seminar devoted a week to infants and the very young, with materials such as *Mother Goose*, *Good-Night, Moon*, and *The Velveteen Rabbit*. Other titles included: *Uncle Remus*, *The Secret Garden*, *The Wizard of*



Michael Marsland

Participants read a sampling of British and French as well as American "classics" for all ages.

The seminar on "Children's Literature, from Infancy to Adolescence." (Left to right: Seminar leader Paul H. Fry and Fellows Martha C. Cavalieri, Jean E. Sutherland, Geraldine M. Martin, and Elisabeth Johnson.)

Oz, *Winnie the Pooh*, *The Wind in the Willows*, *Peter Rabbit*, *Rabbit Hill* (by Robert Lawson), the three E. B. White talking animals books, some Babar (by Jean de Brunhoff), some early Dr. Seuss, and Maurice Sendak. Also considered were: the Hardy Boys, a Nancy Drew, *The Boxcar Children*, and detection chapter books from the Cam Jansen and Encyclopedia Brown series.

Participants together discussed the teaching possibilities of these works, along with their histories, intersections, and syntheses: fairy tales and folk tales, stories with morals, family stories, children's adventures in the absence of parents, magic kingdom and secret hideaway stories, talking animals in all their roles — with the understanding that all these types exist in various voices and registers (from scary to comical, plausible to nonsensical) with varied appeals, from infant to adolescent. The seminar debated interpretive issues and approaches: why romance quests are appealing; the empowerment and freedom of the helpless and constrained; role models both supportive and subversive of parents' wishes; the lingering influence of breakthrough texts; supply-and-demand relations between the marketplace and taste; the conveyor-belt approach that produced series such as Tom Swift, Nancy Drew, and the Hardy Boys; the development of more narrowly targeted audiences; the influence of the Newberry and Caldecott Prizes — and why the classics of past and present deserve, or do not deserve, canonical status.

Fellows — all but one working in grades K-8 — produced curriculum units oriented to their classrooms' needs. Two units concern multicultural fairy tales. Christine Elmore presents stories from a variety of cultures, together with a clear taxonomy of what a fairy tale is and how it can vary. Yolanda Trapp offers a unit on Cinderella stories from many cultures, featuring the chance to learn from variations on a theme, together with social studies applications. Two units were chiefly interested in the use of children's literature for teaching behavior and development. Elisabeth Johnson chooses an array of books that enhance her pedagogical goal of "self-regulated learning," whereby children come to understand the value of teaching themselves and learn how to motivate themselves. Dyanne D'Angelo uses a variety of "problem" books for young children in order to model problems in behavior and socialization, with strategies the books suggest for solving these problems.

Four Fellows wrote units implicitly or directly extolling the virtues of working with a single author, or a series by a sequence of authors, to improve reading skills and further the love of reading. Diane Huot expressly addressed the question of why children (and adults) prefer to read serial books, with a ranking of many series according to mandated guidelines, from easiest to hardest. Jean Sutherland stresses the potential of detective fiction for training many parts of the mind (logic, reading, social understanding, and sometimes scientific understanding), while describing detective chapter book series that feature multicultural teams of child-sleuths. Geraldine Martin adds her skills with puppetry and ventriloquism to the project of teaching very young children across the curriculum with Else Minarik's "Little Bear" series. Martha Cavaliere develops the concept of teaching interpretation skills to below-grade-level sev-

Fellows wrote units to improve reading skills and further the love of reading.

enth-grade readers by creating a "critics'" roundtable discussion of the Dr. Seuss books — allowing students to use their advancing ability to think while unimpeded by their slow progress in reading.

The two remaining units are distinctive. Lisa Omark addresses the Civil War, emphasizing works of fiction and non-fiction featuring individual actors on both sides and in all stations, that can supplement textbooks. Finally, Yel Hannon Brayton, who teaches creative writing to high school students, presents a unit on the human place in the ecosystem with a sequence of bovine characters (cows, bulls, oxen, bison) viewed through a variety of literary perspectives, with special emphasis on Native American folkways.

According to the seminar leader, "Teachers browsing for ideas will find [in the volume of units] an incredible wealth of plot summaries and lesson suggestions with obvious immediate applications."

Representations of American Culture, 1760-1960: Art and Literature

This seminar explored major American art from the Revolutionary Era to the mid-twentieth century, from portraiture and history painting to the murals of the 1930s and the abstract expressionist painting of the 1940s and 1950s. The goal throughout was to link the art to American literature, and beyond that to connect both art and literature to historical events. The seminar investigated how the rich tradition of American visual culture — from John Singleton



Michael Marsland

The goal throughout was to link the art to American literature, and to connect both art and literature to historical events.

The seminar on "Representations of American Culture, 1760-1960: Art and Literature." (Clockwise from left: Fellows Giovanna M. Cucciniello, Waltrina Kirkland-Mullins, Lorna Edwards, Kristin Carolla, Sandra K. Friday, Sean Griffin, and Justin Boucher; standing; seminar leader Alexander Nemerov; Fellows Jennifer J. Flood and Mary Donahue; and Associate Director Josiah H. Brown.)

Copley to Jackson Pollock — can be incorporated into classes on American literature and history. Topics examined included: "Charles Willson Peale, John James Audubon, and the Development of Natural History in America"; "Hudson River Landscape Painting; Depictions of Daily Life: Pleasure and Toil"; "The Fact of Slavery"; "The Civil War in Photography and Painting"; "Mountain Climbing and Painting": "New Beginnings in the West"; "Portrait Dramas: John Singer Sargent and Thomas Eakins"; "Old West and Social Evolution: Frederic Remington"; "Segregation after *Plessy v. Ferguson*: Winslow Homer"; "The Roaring Twenties and Their Discontents"; "Murals and Pictures/Public and Private/Marx vs. Freud: Thomas Hart Benton, Jose Clemente Orozco, Diego Rivera, Stuart Davis"; "Abstract Expressionism: Beauty or Rage?" Among the other artists considered were: Robert Duncanson, the mid-century landscape painter; Henry Ossawa Tanner, the turn-of-the-century religious painter; Romare Bearden and Jacob Lawrence; Norman Lewis, the abstract expressionist; and Wifredo Lam, the Chinese-Cuban follower of Picasso who exhibited his surrealist abstractions in New York in the 1940s and 1950s.

Key authors whose work was read, largely through excerpts, ranged from Emerson, Hawthorne, Melville, and Thoreau to Douglass, Dickinson, and Lincoln, from Theodore Roosevelt to DuBois, Hemingway, and Wilder.

The curriculum units that resulted from the seminar aimed to show how to combine the study of art and literature in the classroom.

The curriculum units that resulted from the seminar aimed to show how to combine the study of art and literature in the classroom. The course descriptions are geared to the elementary, middle, or high school levels, but all feature an attention to visual art as a key facet of students' education. All feature as well a belief that close analysis — learning to look attentively at one thing, be it a painting or a short story or a poem — is vital.

Justin Boucher's unit progresses from basic viewing to a deeper understanding of art in general through various comparisons and guided viewings of paintings; while the topical focus of the unit (daily life in the United States during the antebellum period) fits into a high school U.S. history curriculum, it allows for application elsewhere. Kristin Carolla's middle school unit addresses colonial America through both paintings and literature, helping students to understand religious, social, and economical perspectives. A teacher of students new to the English language, Giovanna Cucciniello introduces them to documentary photography and how it records the life and conditions of individuals and their communities, with the aim of enhancing students' understanding of how photographs are constructed and how documentary photography can express a point of view. David DeNaples' unit asks high school students of history to analyze art of the period of 19th-century American continental expansion and its relationship to the national identity of that era. An English teacher, Mary Donahue invites students to interweave skills used to understand art and literature with the idea of taking charge of one's own identity and becoming aware of choices as an individual. Teaching in an arts magnet middle school, Lorna Edwards presents a supplement to African American

Studies through her unit, "A Bird's Eye View of the Caribbean: Art, Folklore, and Music." Kindergarten teacher Jennifer Flood employs art in developing "A Guide for Teaching Black History at the Elementary School Level," with a focus on the earliest grades. Art and literature, including Ralph Ellison's *Invisible Man*, also complement each other in Sandra Friday's unit, whose final project requires high school students to re-create a piece of art or create art of their own representing an individual, group or movement invisible to the majority of our society. Sean Griffin takes his middle-school students of English on an exploration of Native American history through art as well as literature. And David Reynolds — teaching English at the high school level — fuses art, literature, and U.S. history of the 19th century.

In the volume of these units, the seminar leader said,

Readers will encounter not only a variety of American artists, writers, and events, but also a number of helpful suggestions about how to look closely at individual works of visual and literary art. In a culture in which images move past us at a dizzying rate, in which the instant access to overwhelming amounts of information has never been greater, these [units] offer an antidote of sorts: the chance for students (and teachers) to stop and look at individual works of art and literature, even at specific details in these works. There is a trust implicit in this purpose. The seminar proceeded with this idea in mind: that with the right methods, the right patience and praise, the ability to discern something closely and imaginatively can be a source of pleasure and pride to students of all abilities.

Energy, Engines, and the Environment

This seminar was offered with the idea that the Fellows would be able to adapt what the seminar leader called "a scientific and sometimes dry subject" to a broad student audience, encompassing kindergarten and high school students, capitalizing on a wealth of both traditional and Web-based resources. Many of the Fellows had relatively little science background, so there were rich opportunities for learning in a short period of time.

The seminar began considering energy fundamentals. Key concepts included various forms of energy, work and heat as energy transfer, conservation of energy, and the first and second laws of thermodynamics. The identification of some introductory books and Web sites, according to the seminar leader, "helped the Fellows wade through this material." Participants then examined a variety of energy conversion systems, starting with traditional fossil-fuel based engines, such as steam engines and internal combustion engines, and their cycles. The group also examined a broad range of energy conversion examples, including recent innovations such as fuel cells, hybrid gasoline/electric engines, solar energy systems and wind farms. The third component of the seminar focused on the issue of sustainability and the environment from an

The seminar began considering energy fundamentals. Key concepts included various forms of energy, work and heat as energy transfer, conservation of energy, and the first and second laws of thermodynamics.

energy perspective. Participants discussed pollution from the various energy conversion systems, the larger context and what it will take to address world energy needs in the long run.

The Fellows absorbed these materials and adapted them not only to traditional science curricula, but also to curricula in social sciences, art and history. English teacher Matthew Bachand's unit introduces students to the lives of coal miners through scientific, historical, and literary texts in both print and electronic media. Abie Benítez developed her unit for both English- and Spanish-dominant students participating in a dual-language immersion program that promotes science inquiry in the early grades. Raymond Brooks' unit, "Simple Machines, Engines and the Environment," will assist him in preparing K-8 students for the science fair. A teacher of integrated science at the high school level, Matthew Cacopardo explores energy, work and power. Judith Goodrich wrote "Industrial Revolution in America: Exploring the Effects of the Heat Engine on the Growth of Cities" in order to increase her middle school students' understanding of both science and social studies. Crystal LaVoie, her new high school's first teacher of science, developed an integrated science unit on energy and work that could be adjusted for use in a middle or high school physics class. A bilingual teacher of elementary students, Pedro Mendia-Landa presents a unit that allows children to explore and become familiar with different sources of energy, its acquisition, transport, and how its use affects the environment and our lives. His colleague Kathleen Rende, who teaches kindergarten in the same school, invites her students to relate the idea of fuel to an engine by making responsible choices about the foods they put into their own bodies. A high school teacher of social studies, Ralph Russo prepared a unit, "Fueling around with Energy: A Comparative

The Fellows absorbed these materials and adapted them not only to traditional science curricula, but also to curricula in social sciences, art and history.



The seminar on "Energy, Engines, and the Environment." (From left: Front row: Fellows Raymond W. Brooks, Crystal P. LaVoie, Susan S. Van Biersel, and Matthew D. Cacopardo. Second row: Fellows Pedro Mendia-Landa, Matthew P. Bachand, Judith E. Goodrich, Kathleen C. Rende, Abie L. Benítez, and Kevin P. Inge. Third row: Fellow Sara E. Thomas.)

Study of Conventional and Renewable Energy Use among Nations," intended to promote collaboration with colleagues who teach science. Sara Thomas, an art teacher, created "Machines: Designing Form and Function" to help her high school students think imaginatively across disciplines. Finally, Susan Van Biersel, who teaches special education at the high school level, developed "Fossil Fuel Sources, Usage and Alternatives: What Are the Options?" in partnership with Crystal LaVoie; their aim was to assist students of varying skills to appreciate questions of science and policy as they relate to energy.

Concerning in particular the interdisciplinary units prepared by Fellows who normally focus in the arts and humanities, the seminar leader concluded, "The originality of some of the units developed from a science seminar was inspirational."

Keeping the Meaning in Mathematics: The Craft of Word Problems

The assumption of this seminar was that word problems play a key role in learning mathematics. More specifically, they provide occasions to give concrete interpretations to the compressed symbolic language of mathematics, and thereby help the student access the power of this language. In this view, the act of translation, from common language into mathematical symbols in order to solve a problem, and then back again in order to interpret the solution, is a key aspect of doing the problem, as important in the learning process as the solution itself.

The assumption of this seminar was that word problems play a key role in learning mathematics.

The seminar used a variety of sources to examine the role of problems in the mathematics curriculum. Magdalene Lampert's account of a year of teaching a fifth-grade class (*Teaching Problems and the Problems of Teaching*) was read as an example of a way to approach mathematics instruction exclusively through problems. Sixth-grade mathematics textbooks from Singapore were studied both for their well-constructed problem sets and for a specific highly effective diagrammatic method of solving a wide variety of problems.

Participants also considered broader curricular issues related to word problems. The kind of knowledge needed to teach mathematics well, and in particular, to deal with a wide variety of problems, both mathematical and pedagogical, is explored in the book *Knowing and Teaching Elementary Mathematics*, by Liping Ma. The data for this study were gathered through interviews in which teachers were posed problems situated in the classroom. The interaction between arithmetic and algebra, and types of arithmetic problems which can be used to promote algebraic understanding, were discussed in the book *Thinking Mathematically*, by T. Carpenter, M. L. Franke and L. Levi. The Fellows who teach at the primary level also found that another book, *Children's Mathematics*, provides an interesting discussion of how very young children approach simple arithmetic problems.

Much of the seminar time was devoted to analyzing specific problems, both for their own interest, and as part of larger systems. Participants especially focused on understanding how a given topic can be explored through groups

of related problems. This involves analyzing how the given problems are related to each other, their similarities and differences, and asking how the problems together articulate a given topic, or set of topics. In the seminar, the process of analyzing connected configurations of problems was referred to as "exploring the problem space." This was the organizing principle for the units created for the seminar. Each unit assembles a collection of problems, and discusses how these problems together explore a given topic in the mathematics curriculum. Each author accompanied his or her collection of problems with a discussion of the subject area which the problems address, and sometimes with comments on how the problems fit together or relate to the subject.

Michele Murzak and Roberta Mazzucco, who teach in the early grades, created sets of problems to explore subtraction with renaming. Jennifer Ulatowski, another elementary school teacher, constructed a set of problems with the goal of enabling students themselves to create word problems; she also provided a detailed analysis of the structure of each problem.

Diane Powers, with a fifth-grade class in mind, provides a sequence of lessons to introduce students to aspects of percent. Her colleague Sheila Wade investigates the use of the number line in dealing with fractions and percents. Another teacher at the middle school level, Joyce Bryant, collected a variety of problems constructed by her students, as well as some she constructed herself together with an essay on the importance of problem solving. Carolyn Kinder devised a set of problems with the goal of advancing student understanding of the key properties of the basic operations, also known as the Rules of Arithmetic. Two other Fellows teach middle schoolers. Luis Matos constructed problems which deal with ratio and proportion. Complementing the work of Diane Powers, Susan Gudas' collection of problems again takes up the issue of percent, now at a more comprehensive level appropriate for eighth grade.

Finally, at the high school level Anthony Wight presents a wide-ranging collection of problems which touch on a number of topics, from arrangements of blocks and counting problems, through various problems of "Singapore type" and several kinds of rate problems.

The seminar leader said,

Every collection of problems is a work in progress, always open to adaptation and refinement. The selection and refinement of a set of problems to address a given topic with effectiveness and insight may be a gradual process, carried out over a period of years. Problems may be added, deleted, or modified according to the needs of a given lesson or a given class. Problems may be selected from a larger group according to specific needs. It is hoped that teachers will find valuable material [in the volume of units] for various purposes. One may borrow a set wholesale; another might select an individual problem. Some may modify some of these problems to their own needs, or be inspired to create a new set of problems. All these uses would further the basic goal of the seminar: to encourage use of word problems in mathematics instruction.

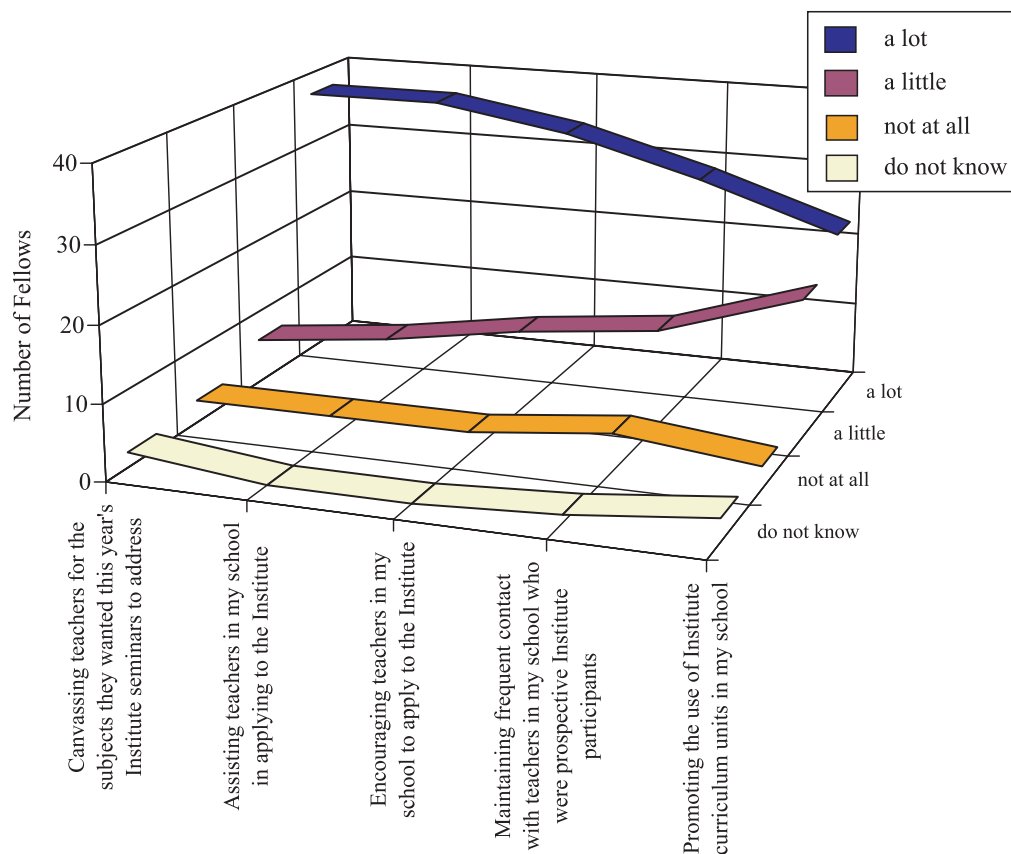
The Process of Determining the Seminar Topics

Between October and December 2003, the teachers who served as Institute Representatives and Contacts for their colleagues had canvassed other teachers throughout New Haven elementary, middle, and high schools to determine the topics they wanted Institute seminars to address in 2004. (Please see Appendix for lists of teacher leaders.) The Representatives met together twice monthly and communicated individually with the school Contacts with whom they were responsible for staying in close touch. The Director and Associate Director of the Institute then approached Yale faculty members who were qualified and willing to lead seminars that engaged the desired topics. The Representatives then considered and selected from among their seminar proposals.

In their evaluations, the 2004 Fellows indicated that the Institute Representative for their school had been helpful in various ways: by encouraging and assisting them to apply to the Institute, maintaining frequent contact with them, asking for their views on seminar subjects for the following year, and promoting the use of Institute-developed curriculum units. (Chart 1, reading from left to right, moves from the more helpful to the less helpful activities of the Representatives.) As a result, 38 (76 percent) of all Fellows said in the end that they had, while the program was being planned, sufficient opportunity to suggest possible topics for seminars. This is comparable to the rate of

Chart 1

Institute Representatives' Helpfulness to the 2004 Fellows



Fellows indicated that the Institute Representative for their school had been helpful in various ways.

satisfaction indicated by the Fellows in 2002 and 2003 (66 and 80 percent, respectively).

The Fellows' Application and Admissions Process

Having worked with teachers in their respective schools during the preceding months, the Institute Representatives met on January 7 to receive for distribution in all schools copies of the Institute application form, brochure, and descriptions of the seminars to be offered. At this meeting a general presentation of the subjects of the seminars ensured that all Representatives could explain to their colleagues the purpose of each seminar. On January 13 the Institute held an open house for prospective applicants where any teacher might learn more about the planned seminars from the Representatives and from the seminar leaders, who made brief presentations about the seminars they would lead and conducted discussions in small groups with teachers who might apply. On January 20 the Representatives met to discuss their progress in working with prospective applicants and to hand in their own completed applications. The final deadline for teachers applying to the Institute was January 27. This date was selected so that teachers would apply in advance of the February school vacation. The office would then have the vacation period to process application materials, and the review of applications could be completed during February to provide the earliest possible notification to teachers who were accepted.

There are four principal criteria for teachers to be eligible for consideration as Fellows:

- The applicant must be a current New Haven school teacher who will be teaching in New Haven also during the school year following Institute participation.

The Institute held an open house where any teacher might learn more about the planned seminars.



Open House for prospective Fellows. (Seminar leader Robert A. Burt.)

- The applicant must agree to participate fully in the program by attending and coming prepared to all scheduled meetings and by completing research and meeting due dates in the preparation of a curriculum unit.
- The teacher must demonstrate in the application that his or her specific interests are directly related to the seminar as it has been described by the seminar leader.
- The applicant must also show that the seminar and the curriculum unit that he or she proposes to write are directly related to school courses that he or she will teach in the coming school year.

For many years it has been the policy of the Institute to allow no more than twelve teachers to enroll in any seminar. The small size of the seminars is necessary both for the collegiality of the Institute experience and for the individual attention that each teacher's work in progress receives from the seminar leader and from other teachers in the seminar. The Institute has aimed each year to gauge the amount of teacher interest in order to offer enough seminars to accommodate almost all teachers who wish to participate. However, in 2004, the number of teachers who applied far surpassed the 60 who otherwise could be accepted. The Representatives asked the Institute's Steering Committee to make an exception to this policy and accept thirteen Fellows to each seminar to accommodate as many of them as possible, without unintentionally diminishing the experiences of all.

The small size of the seminars is necessary both for collegiality and for the individual attention that each teacher's work in progress receives.

During the planning process 109 teachers expressed definite interest in participating in one of the seminars to be offered. Of those teachers, 44 were from high schools, 27 from middle schools, 23 from elementary schools, and 15 from K-8 schools. By the application deadline, the Institute Representatives, assisted by the school Contacts, had obtained applications from 81 elementary, middle, K-8, and high school teachers in the humanities, social sciences, and sciences.

The individual application form calls for the interested teachers to specify the subjects and grade levels they teach, the course or courses in which they plan to introduce the material they study in the Institute, and their willingness to meet each of the Institute's requirements for full participation. The applicants also write a brief essay describing why they wish to participate in the seminar to which they are applying, and how the curriculum unit they plan to write will assist them in their own teaching. Writing this essay is, in effect, their first step in formulating a curriculum unit through which they will bring the material they study from the seminar into their own teaching.

The team application form requires the interested teachers to demonstrate how the team envisions working together in inter-grade and/or interdisciplinary ways and to outline plans for a culminating activity in the school. Teams may receive preference during the admissions process, and are required to submit a final report on their work together during the following school year. If a team is not admitted as such, however, the members of the team may be admit-

ted to the program as individual Fellows. And the Institute encourages all Fellows to work as informal teams in their schools.

To continue to support the school district's efforts to attract and retain qualified teachers, the Institute placed special emphasis in 2004, as in the two previous years, on identifying appropriate ways to assist individuals in their first year of teaching in New Haven. Connecticut's Beginning Educator Support and Training (BEST) program requires that new teachers prepare a portfolio — including extensive lesson plans, videotaped class sessions, and reflection — in their second year in order to be fully certified. In November 2001 in a meeting with district administrators and the Institute Director to explore ways the Institute might support beginning teachers, individuals who were in, or had recently completed, the BEST program, advised the Institute and the school district. Four of the teachers had been Institute Fellows. As a result of this meeting and a consensus of the Steering Committee, the Institute undertook a pilot effort to identify and inform first-year teachers who might wish to become Fellows. We sought to learn whether the collegiality of the Institute and the development of a curriculum unit could assist them in entering the New Haven Public Schools and in completing the required portfolio. Ultimately, twelve (12) first-year teachers applied to participate in the Institute's seminars in 2002, as did nine first-year teachers in 2003, and 12 more in 2004.

All applications were reviewed by three groups: seminar leaders, school principals, and seminar Coordinators. The seminar leaders examined the applications for their relationship to the seminar subject. This afforded each seminar leader the opportunity, as well, to tailor or enlarge the bibliography for the seminar so that it would address the specific interests of the teachers who would be accepted.

All applications were reviewed by three groups: seminar leaders, school principals, and seminar Coordinators.



Michael Marsland

Application Review meeting. (Left to right: Seminar Coordinators Jean E. Sutherland, Carolyn N. Kinder, Sharron Solomon-McCarthy, Ralph E. Russo, and David DeNaples.)

At the same time, the applications were reviewed in the applicant's own school, in keeping with the decade-old decentralizing of administrative functions and decision-making in the school district. The Institute's Representative for each school provided the school principal a copy of each teacher's application to examine. The intention is to increase awareness within each school of the projects that teachers wish to pursue in Institute seminars, to afford an opportunity for the principal and other educational leaders to examine the relationship between teachers' applications and school plans, and to increase the likelihood that the teachers will have a course assignment in which they can use their curriculum unit. In this review, principals answered the following questions:

- Is the applicant's proposal consistent with, and significant for, the curricula and academic plans for your school?
- List the courses and/or the grade levels where the proposed unit will be used; if there are none, state "none."
- Will the applicant be assigned next year one or more of these courses in which to teach the unit?
- Please indicate any special merits or problems you find with the application.

When this procedure was introduced in 1998, Reginald Mayo, Superintendent of the New Haven Public Schools, had written to all principals: "We believe this is a highly promising way for ensuring that the assistance that the Institute provides to individual teachers and to teams of teachers has the best prospect for advancing each school's academic plans." This process informs the consideration of each application, provides each applicant pertinent guidance, and provides an opportunity for Institute Representatives to talk with their principals about the Institute.

The following examples of principals' comments on the Fellows' applications illustrate their appreciation of the significance and usefulness of the curriculum units that teachers in their school will be designing.

This proposal will help our students learn more about the scientific method. . . . Our students are always looking for ideas for Science Fair projects. This proposal will help them see other possibilities and also learn more about the scientific process.

Developing math word problems is a strategy that is taught in all the grades. It is an objective in the school's Comprehensive Plan It is especially important in preparation for the Connecticut Mastery Test [CMT].

This unit will align objectives required for CMT and CAPT [Connecticut Academic Performance Test] testing as well as meet the district's Language Arts standards. [This will have] value in promoting higher-order thinking skills that are needed by our students.

"This is a highly promising way for ensuring that the assistance that the Institute provides has the best prospect for advancing each school's academic plans."

*—Superintendent
Reginald Mayo*

This application is aligned with our curriculum, which emphasizes problem-solving skills and critical thinking. These skills also enhance students' performance on the CMT and CAPT.

This proposal is consistent with NCLB [the federal No Child Left Behind Act] and will motivate more children to read. [This teacher] has chosen to undertake a topic of serious importance. Her students will benefit greatly from the new strategies and techniques she will acquire.

As in the past, the Institute formed a group of teachers who served as Coordinators to assist with the organization and smooth operation of the seminars. The Director, with the assistance of the Steering Committee, selects these Coordinators from the group of Representatives who had earlier helped to select seminar subjects and identify interested teachers. Throughout the year the Steering Committee helps to cultivate teacher leadership and to determine the positions for which individual teachers are best suited.

Coordinators provide teacher leadership without diminishing the collegial rapport within each seminar.

There is one Coordinator in each seminar. They act as liaisons between the seminars and a Coordinators committee to facilitate the exchange of information and to provide teacher leadership without diminishing the collegial rapport within each seminar. A seminar Coordinator must be, and must intend to continue as, a full-time teacher in one of New Haven's public schools. A Coordinator accepts the following responsibilities:

- To work with school Representatives at the conclusion of the application process, to serve on an admissions committee to consider proposals for curriculum development submitted by teachers applying to become Fellows, and to make recommendations to the Director about whom to accept as Fellows.
- To monitor the progress of a seminar through observation and conversation with participants, and to give progress reports at weekly seminar Coordinators' committee meetings.
- To report to the seminar members any organizational information which should be circulated, such as the schedule of any visitors and notice of Institute-wide activities.
- To act as a resource for members of the seminar, providing information about unit-writing deadlines, guidelines for writing curriculum units, computer assistance available to Fellows, copyright procedures, and University facilities Fellows may use.
- To be available to the seminar leader to provide information on Fellows' perceptions of the seminar and on Institute policies generally, and to offer assistance as may be needed.
- To assist with the smooth operation of the seminar by keeping track of Fellows' promptness and attendance and the timeliness of their written submissions, and by encouraging Fellows to make and keep appointments for individual meetings with the seminar leader.

- To attend and come prepared to weekly committee meetings with the Director/Associate Director and to take professional days as needed for the above purposes.

When the seminars began, each Coordinator would participate as a Fellow in a different seminar. At this earlier point they worked together as an admissions committee. They met after school on February 2 to conduct a first reading and discussion of the applications to their respective seminars. They then contacted all teachers whose applications needed to be clarified or amplified. On February 6 the Coordinators met for a full day, by taking professional leave, for their final consideration of most applications. They met again on February 11 to resolve issues remaining in a few applications.

During their review, the Coordinators considered the findings of the school administrators and seminar leaders and made recommendations to the Director about which teachers the Institute should accept. By these means, the Institute seeks to ensure that all Fellows participate in seminars that are consistent with their interests and applicable in the courses they teach. The Institute accepted as Fellows 65 New Haven teachers, 39 in the humanities and 26 in the sciences. One team of teachers, in the sciences, was admitted from New Haven Academy with the expectation that team members would coordinate their curriculum units and work together during the school year, planning cross-grade and cross-subject instruction and school-wide activities. A joint meeting of seminar leaders and Coordinators was held on February 24 to discuss the admissions process just completed, and to review the seminar and unit writing process and the policies and procedures of the Institute.



Michael Marsland

A joint meeting of seminar leaders and Coordinators was held to discuss the admissions process just completed, and to review the seminar and unit writing process and the policies and procedures of the Institute.

Joint meeting of seminar leaders and Coordinators. (Clockwise from left: Alessandro Gomez, James R. Vivian, David DeNaples, Jean E. Sutherland, Carolyn N. Kinder, Josiah H. Brown, Sharron Solomon-McCarthy, Ralph E. Russo, Paul H. Fry, Alexander Nemerov, and Roger E. Howe.)

Consistent with the Institute's aim to serve the largest possible proportion of all New Haven teachers, 30 (or 46 percent) of the teachers accepted in 2004 were participating in the Institute for the first time. Of these first-time Fellows, 17 were in the humanities and 13 were in the sciences. One sixth of all the Fellows accepted (11 of 65, or 17 percent) were Black, seven in ten (47 of 65, or 72 percent) were non-Hispanic White, and 9 percent were Hispanic.

The Fellows Who Were Accepted

Fellows came from 27 of the district's 46 schools, including nine of the ten New Haven high schools, all five of the middle schools, five of the nine K-8 schools, one of the four transitional schools, and seven of the 18 elementary schools. The Institute first admitted elementary school teachers in 1990; this year 14 (22 percent) of all Fellows were elementary school teachers - a slightly lower percentage than in other recent years because of the trend in the district toward establishing more K-8 schools. Twenty-five (38 percent) were middle or K-8 school teachers (including several in the elementary grades), and 26 (40 percent) were high school teachers. Overall, 19 Fellows taught grades kindergarten to five, 20 taught grades six to eight, and 26 taught grades 9 to 12. Three schools had five or more Fellows; four schools had four or more, and nine schools had three or more.

The participants included teachers from all stages of their careers.

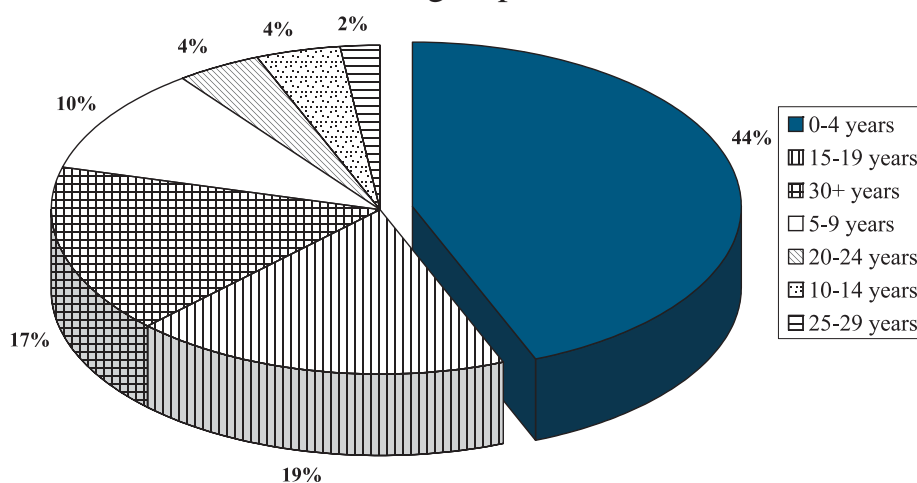
The participants included teachers from all stages of their careers. Perhaps reflecting the effort to recruit new teachers as well as demographic trends among the district's teaching force, 37 percent of Fellows were age 30 or younger. Overall, 49 percent were 40 or younger (compared with 30 percent as recently as 2001), 18 percent were 41-50 years old, and 32 percent were older than 50.

Consistent with the Institute's effort to include beginning teachers, as Chart 2 shows, two fifths of the Fellows (44 percent, following 40 percent in 2003 and 35 percent in 2002) had four or fewer years of total experience in teaching. This was twice the proportion of Fellows with that amount of experience during 1998 through 2001, when the annual average was 20 percent. In 2004 one quarter (23 percent) of the Fellows had twenty or more years of total experience in teaching; one fifth (18 percent) had twenty or more years teaching experience in New Haven. About one half (48 percent) of the Fellows had four or fewer years of experience teaching in New Haven.

Indicative of the need for the professional development that the Institute provides, three fifths (61 percent) of all Fellows have been in their present teaching position four or fewer years. This helps to explain why many teachers say they need to develop their knowledge in subjects that they have been recently reassigned to teach, or curricular materials for students of a different age or background from those they have taught before.

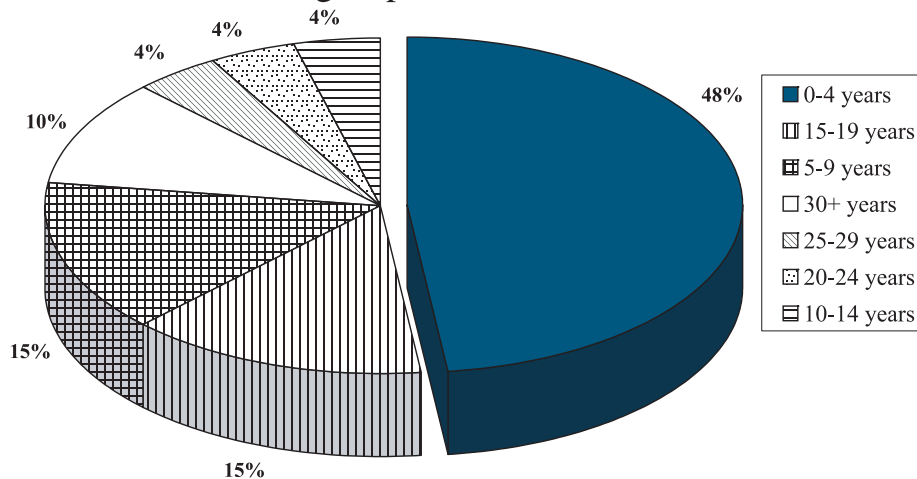
Chart 2

Total Years Teaching Experience for 2004 Fellows



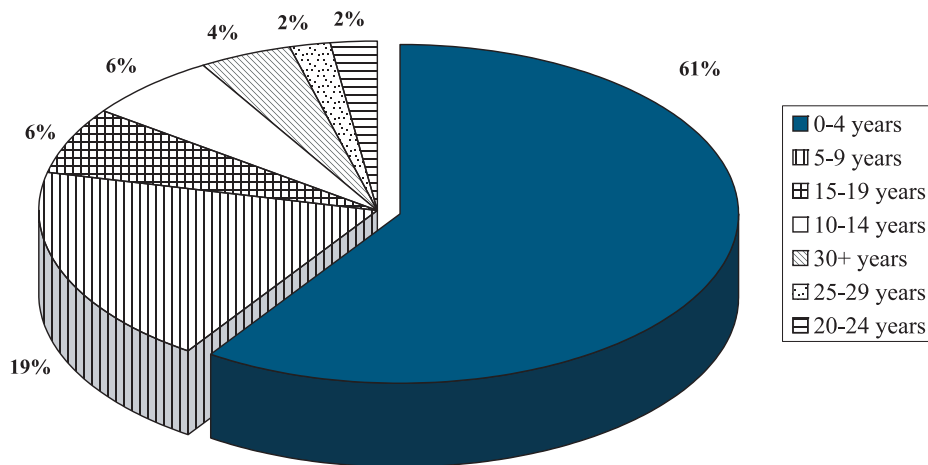
Total Number of Respondents = 48

Total Years Teaching Experience *in New Haven* for 2004 Fellows



Total Number of Respondents = 48

Total Years Teaching Experience *in Present Position* for 2004 Fellows

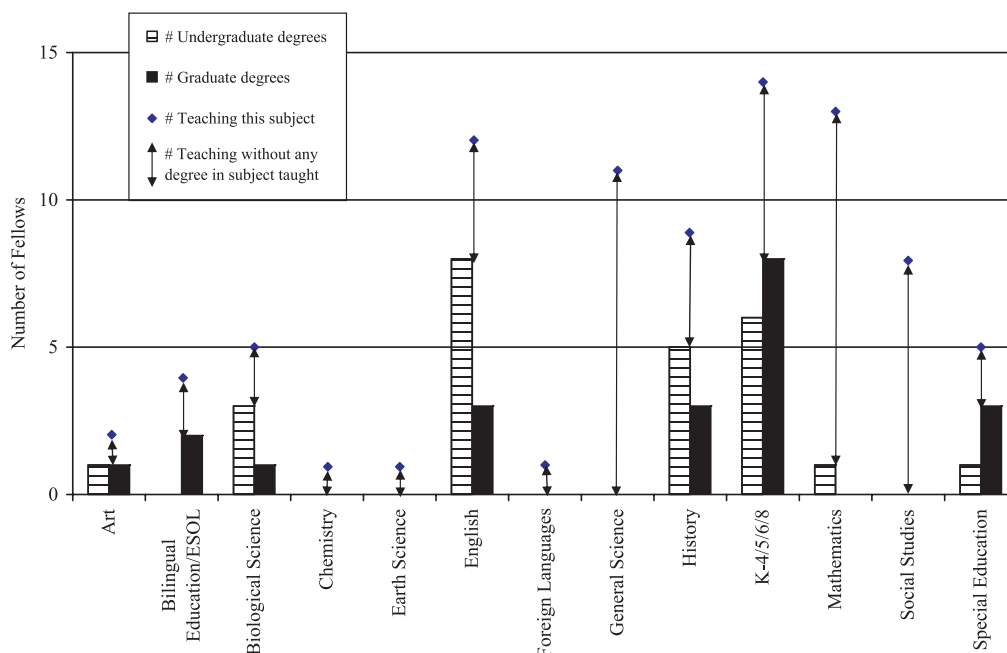


Total Number of Respondents = 47

Three fifths of all Fellows have been in their present teaching position four or fewer years.

As in past years, many of the 2004 Fellows did not major in college or graduate school in the subjects they currently teach. As Chart 3 shows, in no field did all Fellows teaching a subject have a graduate or undergraduate degree in that subject. In five fields — chemistry, earth science, general science, foreign languages, and social studies — no Fellows had a graduate or undergraduate degree in a field they taught. Only one of thirteen teachers of mathematics had a graduate or undergraduate degree in that area. Four of twelve teachers of English and three of nine teachers of history lacked degrees in those areas.

Chart 3
Number of Fellows with Degree in a Subject They Taught
in 2003-2004

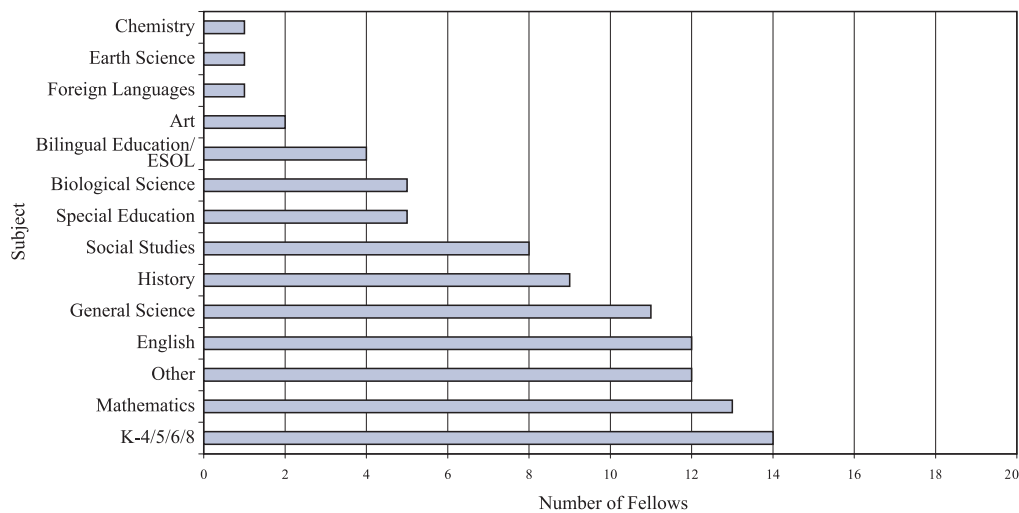


Many of the Fellows did not major in college or graduate school in the subjects they currently teach.

Chart 4 shows the subjects Fellows taught in the 2003-2004 year of their Institute participation. Overall, half (53 percent) of Fellows in the humanities and most (87 percent) Fellows in the sciences had not majored either in college or in graduate school in one or more of the subjects they taught in that year.

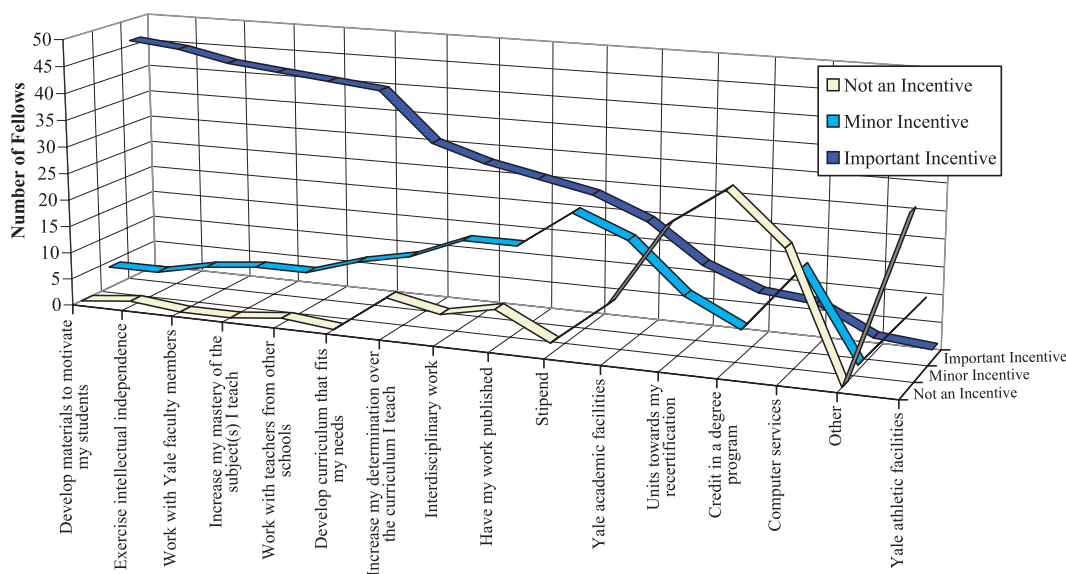
When the 2004 Fellows were asked about the incentives that attracted them to participate in the Institute, they responded (as Chart 5 shows, reading left to right from the most to the least important) that the most important incentives were the opportunities to develop materials to motivate their students (92 percent), to exercise intellectual independence (90 percent), to work with university faculty members (88 percent), to increase their mastery of the subjects they teach (86 percent), to work with teachers from other schools (84 percent), and to develop curricula to fit their needs (80 percent). Indeed, incentives that might be imagined to be important for teachers with

Chart 4
Subject Taught by 2004 Fellows



access to Yale University — credit in a degree program and access to Yale athletic facilities — were much less important for Fellows in the Teachers Institute.

Chart 5
Incentives for 2004 Fellows to Participate



As past Institute studies have shown, Fellows are in most respects highly representative of all New Haven teachers. So, for example, this year's Fellows continue to reflect the gender and ethnicity of all New Haven teachers, though as in most other cities there are great disparities overall between the gender and ethnicity of New Haven teachers and of their students. (See Table 1 below.) Similarly, the Yale faculty members who have led Institute seminars generally reflect the wider faculty at Yale.

Table 1

Ethnicity and Gender of Participants

	White non-Hispanic			Black non-Hispanic			Hispanic			Other		
	All	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female
Institute Fellows, 2004	78%	20%	56%	12%	2%	10%	8%	4%	4%	2%	0%	2%
Institute Fellows, 1978-2004	69%	20%	49%	25%	5%	20%	4%	1%	3%	1%	0%	1%
New Haven Public School Teachers, 2004	73%	19%	54%	18%	4%	14%	7%	1%	6%	1%	0%	1%
New Haven Public School Students, 2004	11%	5%	6%	54%	28%	26%	31%	16%	15%	3%	2%	1%
Institute Coordinators, 2004	60%	20%	40%	40%	0%	40%	0%	0%	0%	0%	0%	0%
Steering Committee, 2004	60%	20%	40%	20%	0%	20%	20%	20%	0%	0%	0%	0%
Representatives and Contacts, 2004	61%	17%	44%	28%	8%	20%	8%	1%	7%	3%	0%	3%
Institute Seminar Leaders, 2004	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Institute Seminar Leaders, 1978-2004	88%	73%	14%	7%	6%	1%	5%	2%	2%	0%	0%	0%
Yale Faculty, 2004 (includes tenured and term ladder faculty)	86%	63%	23%	3%	2%	1%	3%	2%	1%	9%	6%	3%

Totals may not add to 100% due to rounding.

Fellows are in most respects highly representative of all New Haven teachers.

Activities for Fellows

At the first organizational meeting of each seminar, held on March 2, the seminar leader distributed an annotated bibliography on the seminar subject and presented the syllabus of readings that he proposed that the seminar would consider. The Fellows described the individual curriculum units that they planned to develop. This afforded the members of each seminar an overview of the work they were undertaking together and the projects they would pursue individually. The bibliographies both introduced the seminar subject and guided Fellows as they began research on their curriculum units. Several Fellows noted the value of their seminars' reading lists. One said, "The readings were interesting and valuable. I will definitely use the books again." Another observed, "The amount and quality of the reading was absolutely appropriate and served not only to inform the seminar discussions, but [also to] relate in some way to all the units that Fellows were writing." A participant in a different seminar called the experience "extremely valuable" and praised the seminar leader's choice of readings:

The selections we read elicited effective discussions, and allowed me to analyze the text and understand its relation to the assigned topic. The discussions provided me with insight to approach my unit.

Another wrote:

The books that I chose were suggested to me by either my seminar leader or other group members. We would read these books and then discuss them. Through our group discussions I always felt that I gained profound insight. I learned more about myself as a teacher, and I realized ways that I can improve.

Before the second seminar meeting all Fellows met individually with their seminar leader to discuss their projects. The Institute requires that Fellows schedule at least two such conferences as part of the unit writing process; many Fellows, however, meet more frequently with their seminar leader. At the end of the program, most Fellows (84 percent) said that they had ample opportunity to discuss their choice of readings with the seminar leader. According to one Fellow, "[The seminar leader] was often available after class to advise and answer any questions regarding the lesson or unit. He criticized as well as suggested changes and improvements to the unit, revealing a genuine concern for the final work."

A seminar leader also characterized these individual meetings as "invaluable" early in the seminar, when he was able to offer "very specific" suggestions "about the merits and problems" of proposed units. He said, "These discussions got the [Fellows'] units into constructive shape very early — a key." Another seminar leader observed, "These meetings were devoted primarily to planning for the units — specifically, choosing and refining topics, selecting and analyzing [material], and discussing drafts."

During the period that preceded the regular weekly meetings, Fellows continued their reading, both preparing for the upcoming seminar discussions and working toward a brief prospectus of what their final units would contain. At the second seminar meeting, on April 6, Fellows submitted this prospectus, presented their revised unit topics, and began to discuss the common readings. The regular weekly seminar meetings began on May 4; thereafter Fellows continued to develop their units in stages, with a first draft submitted on May 25. The weekly meetings of the seminars continued through July 13, with Fellows submitting the second draft of their units on June 29 and their completed units by July 31.

For several years, Fellows have been asked to submit the prospectus, together with a revised topic of the unit and a list of appropriate readings, at the time of the second seminar meeting. This allows them a full six weeks to write a first draft. The due date for the second draft is late enough to allow Fellows ample time to address the comments they received on the first draft

"We would read books and then discuss them. Through our group discussions I gained profound insight. I learned more about myself as a teacher, and I realized ways that I can improve."
—Institute Fellow

"The frequency of meetings was imperative to the program — having a seminar at least once a week is a must. It allowed us to have a strong, continuous relationship with [the seminar leader] and a constant ability to recall the material we were dealing with."

—Institute Fellow

The Institute attaches great importance to the process through which Fellows develop their curriculum units.

from other Fellows and from the seminar leader. A majority of the Fellows have been satisfied with this schedule and its methodical series of deadlines during the spring and into the summer. Overall, 78 percent of the Fellows (compared with 69 percent in 2002 and 87 percent in 2003) thought the unit writing deadlines occurred at the right time in relation to the school calendar. According to one Fellow, "The deadlines were appropriate and the Institute overall was sensitive to New Haven teachers' needs." Another said:

I think that the frequency of meetings was imperative to the program — having a seminar at least once a week is a must. It allowed us to have a strong, continuous relationship with [the seminar leader] and a constant ability to recall the material we were dealing with.

Fellows emphasized the value, as well as the challenge, of investing effort over an extended period. One said:

My unit and Institute participation will greatly influence my teaching because I spent in excess of three months working on ONE unit! The sheer amount of time that the Institute allows for unit development provides the opportunity for top-quality lessons. Teachers are often crunched for time during the school year, and developing a good, user-friendly unit when one is not under pressure to teach that topic immediately is an invaluable time-saver.

Agreeing that the experience "will broaden my teaching abilities and have an enriching impact on my classroom," another Fellow continued:

Participation in the Institute allowed me to thoroughly design, research, and write a concrete and detailed unit plan long in advance of teaching it. . . . Once the school year starts, it is hard to thoroughly do anything professionally. The Institute allows me as a teacher to develop professionally in a constructive way, as I choose.

The Institute attaches great importance to the process through which Fellows develop their curriculum units, and many Fellows commented upon the benefits derived from following this process — including planning, reflection, and growing mastery of the subject. One Fellow said, "Through the seminar I gained a greater knowledge of the historical context related to my curriculum. I will now be able to provide students with a more solid base from which they can analyze the texts. I can answer their questions more thoroughly and confidently." Others observed:

This program has allowed me the opportunity to create a wonderful unit for my students. After participating in the Institute I feel much more prepared to teach about a subject which I might not have

tried to tackle on my own. This was far less intimidating and I now feel that I have a firm grasp on this information. It will also push me to make all of my units as detailed and well thought-out as this one.

I enjoyed hearing what my colleagues were planning to develop with their units and I think we all valued the content suggestions made by our seminar leader. I valued his insistence that we "focus" on a narrower topic when planning our units. He was also quite adamant about discovering good sources.

The discussion of Fellows' units-in-progress contributes both to the writing process and to participants' seminar experience. One Fellow said she "looked forward to the seminar every week and gained a great deal of information and encouragement from the other participants. It was also interesting to learn about the projects that others were working on and how they were intending to use their curricula in their classrooms." A participant in a different seminar described "a good balance between learning about the seminar subject matter and discussing our units-in-progress." She commented, "[The seminar leader] was very knowledgeable. . . and I truly looked forward to each session. I received sufficient guidance on developing my curriculum unit and am very pleased with the final product." Another who had "a very rewarding experience" said "The feedback from my peers and the seminar leader was invaluable throughout the process of writing the curriculum unit."

At the conclusion of the seminars, most Fellows indicated that the program schedule (86 percent) and the guidelines for writing a unit (84 percent) had been useful to them to a great or moderate extent. This year 58 percent of



"The feedback from my peers and the seminar leader was invaluable throughout the process of writing the curriculum unit."

—Institute Fellow

The seminar on "Representations of American Culture, 1760-1960: Art and Literature." (Left to right: Seminar leader Alexander Nemerov and Fellows Jennifer J. Flood and Mary K. Donahue.)

the Fellows said they tried out the subject matter and 80 percent said they tried out the strategies of their units in their classroom. Of those who did, almost all Fellows (98 percent) said this influenced what they included in the final units. According to one:

I have already used numerous items from my curriculum unit in my summer school classes. I felt comfortable taking my students to the Yale Art Gallery and discussing a painting with them, which is something I shied away from in past years.

During the first two months of the program, which serve as a reading period, all Fellows also met together on Tuesday afternoons for a series of talks. These talks are designed to expose all Fellows to some of the work done in seminars other than their own, and in some cases to subjects and leaders of possible future seminars. Ordinarily, therefore, some current or prospective seminar leaders are included in this series. Other faculty members may be invited to address topics the school Representatives believe will be of particular interest to many Fellows, based on the interests expressed during the months of canvassing the preceding fall.

Current seminar leaders gave three of the five talks in 2004; two prospective seminar leaders also gave talks.

- On March 9, Robert A. Burt spoke about same-sex marriage and civil rights in a talk titled, "Constitutional Law and Moral Truth."
- On March 23, Paul E. Turner discussed the "Evolution of Infectious Diseases" in the United States and around the world.
- On March 30, Paul H. Fry asked "What Does It Mean to be a

Fellows met together for a series of talks designed to expose all Fellows to the seminars and to subjects and leaders of possible future seminars.



Michael Marsland

Paul E. Turner speaking on the "Evolution of Infectious Diseases."

Talking Animal?" in a comparison of E. B. White's *Stuart Little*, *Charlotte's Web*, and *The Trumpet of the Swan*.

- On April 13, Alexander Nemerov evoked "The View from on High: Looking Down from the Catskill Mountain House, 1825-1963" in a presentation on mountain tourism in 19th-century American art.
- On April 27, Sarbani Basu explored "Solar Variability and Its Effects on Us," from sunspots to electromagnetic storms and the terrestrial climate.

The talks were generally popular among Fellows, if slightly more controversial than in the previous two years. As was the case in some earlier years, criticisms concerned the use of precious time —whether that time might have been used more effectively in different ways within the Institute. One Fellow believed "that the talks should be semi-mandatory." Another "enjoyed the talks" and found it "very interesting to hear different professors speak about their work," but added, "I was more interested in some of the talks than others, and also felt that some were more pertinent to teaching and relating to students. However, they were all very informative and presented new and interesting information."

Most Fellows saw in the talks the purposes for which they were organized. Virtually all (96 percent) Fellows said that to a great or moderate extent the talks provided them intellectual stimulation, while most said they provided a sense of collegiality and common purpose among Fellows (76 percent). Nearly two thirds (65 percent) said the talks were successful to a great or moderate extent in providing an overview of Fellows' work in the seminars. A larger proportion (87 percent) said that the Institute scheduled the right number of talks.

One Fellow "thoroughly enjoyed listening to the presentations of professors from various fields of study." Another called the talks "interesting, pertinent to teachers, and professionally administered." One who "loved the Institute" included "listening to the talks" as among the program's "strengths." Another Fellow, who described the talks as "very interesting," said they "provided a wonderful overview of the seminars offered. I feel this is an important part of the Institute with the added benefit of allowing us to come together as a group."

Many Fellows reported that the talks prompted them, to a great or moderate extent, to read about the talk topics (51 percent, equal to the 2001 figure though down from 70 percent in 2002 and 60 percent in 2003), discuss the topics with their students (55 percent), and discuss the talks with other teachers (86 percent). In the latter two respects, these figures were similar to reactions expressed in the three prior years.

As in other recent years, the Institute scheduled an early session on curriculum unit writing. As part of their admissions folder, all Fellows had received Institute guidelines and mechanical specifications for preparing cur-

"The talks provided a wonderful overview of the seminars offered. I feel this is an important part of the Institute with the added benefit of allowing us to come together as a group."
—Institute Fellow

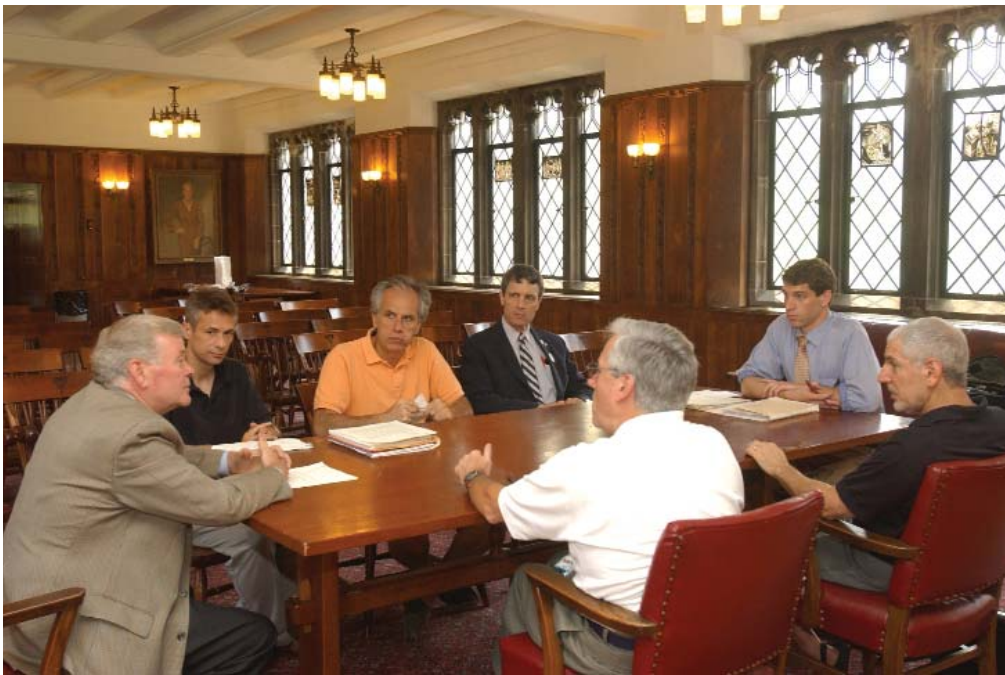
riculum units, which outline the Institute writing process and the five steps for Fellows' formulating, reformulating, and enlarging their individual units. On March 16, the teachers serving as seminar Coordinators comprised a panel in leading a session on curriculum unit development.

The Coordinators spoke from their own experiences as Institute Fellows in researching and writing new curricula. Teachers themselves of the elementary, middle and high school levels, the Coordinators spoke to all the Fellows about: "Narrowing Your Topic and Considering Your Audience"; "Following the Institute Process for Unit Development"; "Aligning Your Unit with School Plans and District Goals — and Using Technologies for Research and Writing"; "Using the Institute's Reference Tools"; and "Collegiality and Professional Development: The BEST Portfolio and Beyond." After questions, the Fellows were divided into seminar groups, where each Coordinator led a discussion of purposes and practices in writing Institute curriculum units. This offered an opportunity for the first-time Fellows to learn about the guidelines and other aspects of curriculum unit writing from experienced Fellows. It encouraged veteran Fellows to share their experience and allowed all to discuss how the completed volume of units might display a range of teaching strategies and contain a standard form of annotation. By leading these discussions, the Coordinators also identified themselves as being knowledgeable about the process of writing curriculum units, so that other Fellows might later seek their advice. An electronic slide presentation underscored key considerations.

On May 6 the seminar Coordinators and Steering Committee organized a discussion to recognize and encourage the new teachers participating as Fellows. The new teachers spoke with other Fellows about their experiences in the Institute and in their schools. The event was an opportunity for the experienced Fellows to congratulate their new colleagues for participating in the Institute during their challenging first year of teaching, to invite them to seek guidance from veteran Fellows who had faced similar challenges, and to reflect with them on teaching in New Haven.

At the Coordinators' weekly meetings with the Director and Associate Director, which were held after seminar meetings, they discussed the progress of each seminar and gained an overview of the program. In addition, the Coordinators met with the seminar leaders immediately before the program began to provide them with information about the teachers who had been accepted and to discuss their role in assisting with the conduct of the seminars. Both seminar leaders and Fellows acknowledged in their evaluations the essential role of the Coordinators. Nearly all Fellows (93 percent) agreed that the Coordinators provided teacher leadership without diminishing the collegial relationship within the seminar. Fellows found the Coordinators to be helpful either a lot (80 percent) or a little (20 percent) in providing information about unit writing deadlines; helpful either a lot (63 percent) or a little (35 percent) in providing information about guidelines for unit writing; helpful either a lot (70 percent) or a little (26 percent) in monitoring the process of the seminar

Both seminar leaders and Fellows acknowledged in their evaluations the essential role of the Coordinators.



Michael Marsland

The seminar leaders met monthly. This gave them an opportunity to talk with one another about their approaches and experiences.

Seminar leaders meeting. (Clockwise from left: Director James R. Vivian; seminar leaders Alexander Nemerov, Alessandro Gomez, and Roger E. Howe; Associate Director Josiah Brown; and seminar leaders Robert A. Burt and Paul H. Fry.)

through observation and conversations with seminar members; helpful either a lot (53 percent) or a little (39 percent) in providing information about the use of University facilities; and helpful either a lot (49 percent) or a little (45 percent) in facilitating discussion of Fellows' work in progress. Few Fellows found the Coordinators unhelpful in any respect. One Fellow characterized the Coordinator as "very useful" as well as "very friendly, helpful, and kind." Another termed "communication between the seminar Coordinator and other participants" a "strength." A third "felt comfortable calling my seminar Coordinator and asking questions" about "any number of things." And a fourth said, "My Coordinator was fabulous in aiding in the process of writing our units, and making sure we understood [the procedures] of the Institute."

To maintain current information on the program and to address any problems that arose, the Institute Director and Associate Director met monthly with the seminar leaders as a group. This also gave the seminar leaders, three of whom were conducting an Institute seminar for the first time, an opportunity to talk with one another about their approaches and experiences.

Rewards for Fellows

The seminars are the core collaborative experience of the Institute, and each year most Fellows' comments about the seminars have been strongly positive. This year their comments again were often enthusiastic. According to one, "I found it challenging and invigorating. The professor was amazing. He developed an excellent rapport with the group, and I felt confident that I would be successful because he was attentive to my individual questions and needs."

Another described the seminar as "fresh and insightful" as well as "fascinating," with the seminar leader "demonstrat[ing] a true teaching experience because not only did he provide us with meaningful information, he made us dig deeper into ourselves and look at different perspectives." A third Fellow observed, "The people in the seminar came with a clear purpose. No one was there [merely] to fulfill certification requirements." She continued, "Our seminar leader had his own continuing experience that provided us with a conceptual framework useful in addressing the everyday problems of classrooms. . . . Our experience was both liberating . . . and useful." Another with "very positive" reactions cited "the other seminar members, our seminar leader, and the unit I was able to write."

In a kind of case study on the Institute's challenges and rewards, one Fellow wrote:

I found the Institute to be a very difficult, taxing, and rewarding experience. . . forc[ing] me to question my practice, my approach to planning, and my assumptions about teaching in general. . . . By forcing myself to deal with these questions in a deliberate and straightforward manner . . . I feel I am already a better teacher. Also, I think my unit will be better than it would have been had I not faced these difficulties. . . . I came through a difficult process feeling more confident that I am a reflective, flexible practitioner. I have rediscovered the assets that academic research provide to teaching which were heretofore neglected due to my competing senses of urgency to deliver instruction and my focus on how to deliver the instruction. . . . I have to spend more time thinking about the context of what I teach — this is where the academic approach

"I came through a difficult process feeling more confident that I am a reflective, flexible practitioner. I have rediscovered the assets that academic research provide to teaching."

—Institute Fellow



Michael Marsland

Fellow Mnikesa Whitaker and her students at Fair Haven Middle School.

comes in — in order to be truer to my core academic purpose: to teach the right things in the right way. The second way in which I have been rewarded is through the benefit of having an entirely new unit that I can not only teach on its own merits, but that I can continue to refine and shape as my reflections on my teaching practice and my unit planning process continue to change.

Others said:

The seminar ultimately proved to be immensely informative, intellectually stimulating, and timely. [The seminar leader's] presentation of the subject matter addressed a wide variety of issues. . . . Audiovisual and hands-on demonstrations . . . were provided. [He] adjusted his [plans] to incorporate topics of interest voiced by the Fellows. . . and maintained an open-door policy to meet with Fellows at mutual convenience.

[The seminar] offered me an informative and educational experience rife with practical information that will become a fixture in my classroom. I found [the seminar leader] both interesting and knowledgeable, and he showed consistent interest in how his methods would work in the classroom. The seminar format worked very well, allowing for discussion and valuing the input of seminar members.

My experience in my seminar this year was outstanding! I was so excited with the opportunity to learn again. The topic that I was studying was a stretch for me, and it was a challenge to write a unit that would relate well to the course of study. But I really think that that is what the Institute is all about — the ability to push oneself intellectually. By keeping up that practice ourselves we can more effectively encourage that in our students.

The experience was tremendously beneficial both professionally and personally. . . . [The seminar leader] helped me to gain new insights from the books . . . and gave us opportunities to influence what books we read and to influence the course of discussion about each book, thereby allowing us to modify the seminar to our needs. I loved writing the unit. It was difficult, at times, to find my own voice and determine what I wanted to say; I had a lot of trial and error. [The seminar leader] was very patient as I did this, giving me valuable feedback throughout the process. . . . In addition, I enjoyed meeting other professionals from our school district; forming personal bonds with other teachers strengthens my commitment to the children of New Haven.

My seminar was exhilarating and inspiring. I can honestly say that I looked forward to each and every class. [The seminar leader] gave us

“That is what the Institute is all about — the ability to push oneself intellectually. By keeping up that practice ourselves we can more effectively encourage that in our students.”

—Institute Fellow

plenty of methods and techniques. . . and he made himself available to us for questions or separate discussions, if needed. The tone of our seminar was wonderful: everyone felt comfortable speaking. . . but we all remained on task and respectful of the subject matter. . . . This has been a thoroughly enjoyable experience, and I think it would be great for every teacher.

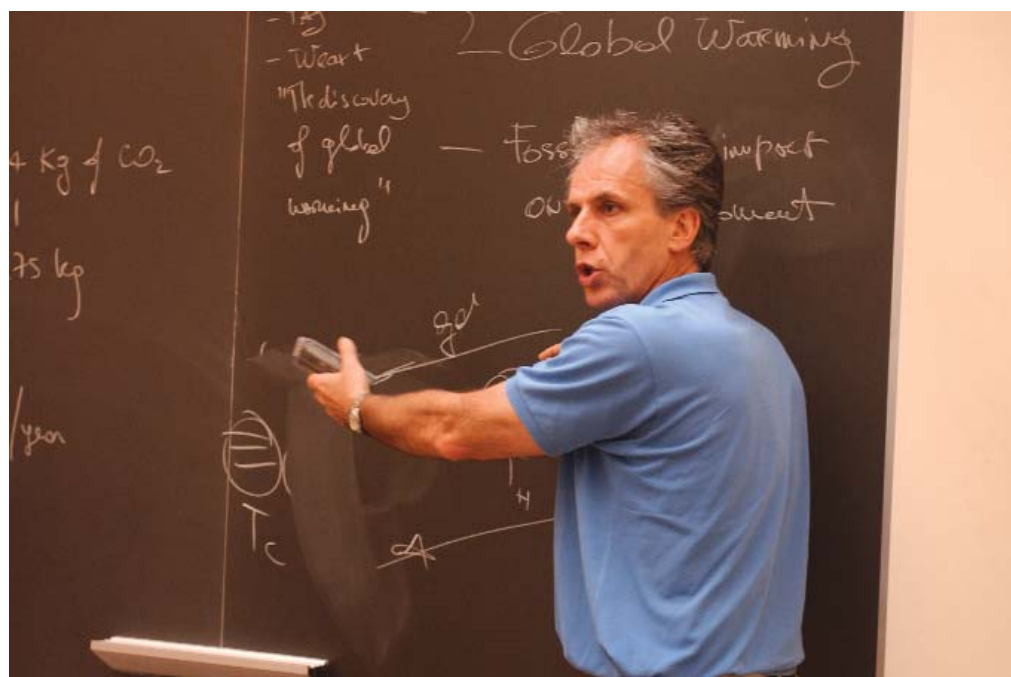
The Yale faculty members who led seminars commented on the benefits they derived. One said, "Meeting teachers was an important motivation for me. Overall, I was pleased with my group. They did the reading and participated well in the seminar discussions." He noted that "The units improved markedly over the course of the seminar, and the final drafts were significant improvements over the second drafts. . . . I also believe that I learned some things that will help me support the Fellows' work better in a future offering of this seminar."

Another said, "The top units are first-rate and demonstrate engagement, commitment, inventiveness on the part of the teachers that bode well for the future of our schools. . . . I was impressed by the resourcefulness of a few of the Fellows that took the material and 'ran with it,' in ways that I had not anticipated." A third seminar leader wrote that "Fellows read the material with considerable care; their questions were on point and often penetrating." And a fourth said his "biggest challenge — and in a way the one that produced the most exciting moments for me — was the task of bringing the course material back around to the realities of elementary school, middle-school, or high-school classrooms."

Fellows themselves cherished the opportunity to work with other teachers across the artificial boundaries that often separate schools and disciplines

"My biggest challenge — and in a way the one that produced the most exciting moments for me — was the task of bringing the course material back around to the realities of elementary school, middle-school, or high-school classrooms."

—Seminar Leader



The seminar on "Energy, Engines, and the Environment." (Seminar leader Alessandro Gomez.)

as well as grade levels. According to one Fellow, "I found it easier to collaborate with other educators in the New Haven school district and discuss the needs of our children throughout the K-12 curriculum. Learning more about the secondary level also allowed me to build a formation for my unit." Another called the exchanges in the seminar "extremely enlightening. It was a joy to be able to discuss literary concepts and topics with my colleagues, share our experiences with first-graders to high school seniors, and compare our differing school environments." This Fellow identified "both intellectual stimulation and educational camaraderie" as among the seminar's virtues. Another said, "Nowhere else in my professional life do I have the opportunity for this dynamic among elementary, middle school and high school teachers." A different Fellow "was able to form relationships with teachers that I did not know and we shared our experiences with the students we teach. . . . Also we were able to examine closely the curriculum at each grade level." And another said:

By far the best part of this seminar was the interactions among math teachers from grades 1-12 in our meetings. We shared struggles and successes and often worked on problems together with no distinctions made or needed between elementary and higher level teachers — the common concern was communicating understandings of mathematics and developing problems which would allow and stimulate our students to explore and investigate mathematical ideas. Our seminar became in the best sense a 'vertical' study team or teaching peer support group which allowed any member to bring a problem or question forward for critical examination. This activity on a regular basis throughout the school year would do much to enliven mathematics for students and mathematics instruction for teachers.

Several teachers spoke of the inspiration and unity they discovered in working together. One said "The people in the seminar were very helpful and it was a great experience. It seemed to end too soon." Another who said the "atmosphere of our seminar was very good" observed:

Many of us would stay after and share ideas on how to shape the units and just how to get our students to do what we thought they should. . . . These discussions were at least [as valuable as the subject] content. What impressed me most about my colleagues was the creativity with which they approached their lessons.

The Institute's participants and staff have been asked over the years whether the co-professionalism among Yale faculty members and New Haven school teachers, for which the program is widely known, is authentic. The mutual respect between Fellows and seminar leaders characteristic of the seminar experience attests to the collegiality on which the Institute is founded. One seminar leader said, "While I contributed most of the general background, the Fellows were quite inventive in coming up with interesting lessons for their audience." Another, who cited "the intellectual quality of the Fellows," said all

The mutual respect between Fellows and seminar leaders characteristic of the seminar experience attests to the collegiality on which the Institute is founded.

"were engaged in the subject matter and our seminar discussions were lively throughout." A third leader commented that while the academic subject matter should be the focus of any Institute seminar,

It's also crucially and properly necessary to orient a great deal of time toward the Fellows' experiences and hopes as teachers. On this topic they're the experts, not we, and it's in finding a point of contact between one's own expertise and theirs that we realize the ideal of a conversation among professionals gathered around a table.

Fellows, too, expressed admiration for their Yale colleagues and appreciation of the collegiality they helped to cultivate. One who found the seminar "highly engaging" said the seminar leader's "style of teaching was absolutely wonderful. . . . He guided the class to become interpreters. I would definitely participate in another one of his seminars." Another Fellow called the seminar leader "a fantastic teacher" who "was always well prepared and willing to help." A member of a different seminar said the leader's "subject matter knowledge, humor, and personality made this an enjoyable seminar." And a fourth, who "learned an amazing number of concepts and details" about science, attributed this to "the wit, expertise, and collegial style of our seminar leader." Others wrote:

"The seminar leader raised the intellectual bar. . . . He was also quite patient when working with Fellows during the completion of our units and was respectful and genuinely interested in discussions regarding the trials and tribulations one faces in teaching today."

—Institute Fellow

[The seminar leader] raised the intellectual bar. . . . He was also quite patient when working with Fellows during the completion of our units and was respectful and genuinely interested in discussions regarding the trials and tribulations one faces in teaching today.

I found the seminar to be extremely enjoyable and intellectually stimulating. The seminar leader was always prepared and encouraged participation from the group. He was willing to learn more about the educational field and frequently asked us to share ideas on what was appropriate to show our students. . . . I thoroughly enjoyed working with the other New Haven teachers and felt we were all encouraging and considerate of each other's ideas and perspectives.

In short, praise for seminar leaders and their teaching approach was common. According to one Fellow, each seminar meeting "reflect[ed] the intense preparation" of the leader. "The manner in which he showed the [participants] how to discuss, dispute, and observe" the subject indicates "great skill." A member of a different seminar wrote that the seminar leader "was sensitive and knowledgeable about the state of student competency and the challenges of teaching."

Others said:

My experience in the Institute was fabulous. The seminar leader was brilliant and engaging. He also had a great sense of humor. He

came to each session well-prepared and moved things along at a good pace. He was also very responsive to phone calls and e-mails.

The seminar leader was very supportive and was always willing to offer assistance. He was also very knowledgeable of the subject matter but not once was he intimidating or unapproachable.

Relating Seminar Topics to Curriculum Units

Each Institute seminar must balance the complementary and inseparable but sometimes competing demands for studying the seminar topic and developing specific applications of that knowledge for school classrooms. The Fellows, coming from elementary, middle, and high schools, are obligated to develop curriculum units that have some demonstrable relation to the seminar topic, but they are free to devise curricula that enter territory not covered in detail by the seminar. The curriculum units, therefore, have a diversity of subject and approach that one would not expect in a regular university course on the seminar topic. As a result, discussions in the seminar, while doing justice to the common reading, can also range widely over substantive and pedagogical issues relating to the curriculum units. Some comments by seminar leaders and Fellows quoted earlier have indicated that each seminar approaches these demands differently as seminar leaders strive for an appropriate balance.

The Institute encourages Fellows to incorporate in their curriculum units both subject matter and skills that are called for by the local curriculum framework — including a strong emphasis upon literacy — and the statewide Connecticut Mastery (CMT) and Academic Performance (CAPT) Tests, administered in grades four, six and eight, and ten, respectively.

One Fellow said the thrust of her unit "is taken right out of the New Haven Public Schools curriculum guide and is perfectly tailored to meet the diverse needs of my student population." Another wrote that as a result of the Institute, "I am better versed in the standards for mathematics and even more prepared to teach the subject matter of word problems." Another observed, "The Civil War and its associated standards have long been part of the sixth-grade American history curriculum. My unit will support those standards and the curriculum content." Others expanded on the purposeful connections between their Institute curriculum units and academic standards, and on how the seminar process can support rigorous instruction and collaboration:

I am very enthusiastic about teaching my curriculum unit this coming school year. I really think that my students will enjoy reading and writing about [the subject]. At the same time I feel that I have . . . addressed the Language Arts curriculum frameworks through all of the engaging activities. . . . Since our focus in third grade is on writing narratives, students will also be called upon to write their own.

The Institute encourages Fellows to incorporate in their curriculum units both subject matter and skills that are called for by the local curriculum framework — including a strong emphasis upon literacy.

I will continue to promote vertical teaming by math teachers in New Haven, building on what I see as one of the most valuable "unplanned" aspects of our seminar this year. The implications for strengthening curricula seem obvious. Math teachers in New Haven are expected to follow set curricular guidelines and to prepare students for standardized tests. Often the year-to-year transitions and information-sharing about particular student strengths and weaknesses get the least attention. . . . Opportunities to just talk among multi-grade level instructors would be a great help.

As a result of my participation in the YNHTI seminars I have been able to expand my professional practice to include literature, science, technology, and political implications of scientific and technological issues. This has helped me contribute to a community of learners that is striving for both academic and pedagogical excellence. My students have been able to explore and acquire new vocabulary and concepts that otherwise I may not have had the knowledge and tools necessary to help them learn.

Ultimately, more than two thirds of this year's Fellows (70 percent) said that there had been a successful balance in seminar between general study of the seminar subject and Fellows' work in progress on their units. As one Fellow related,

"I very much enjoy the seminar format: reading, lecture, discussion. It has become a model for me with respect to teaching my writing classes, and students respond to it very well."

—Institute Fellow

I very much enjoy the seminar format: reading, lecture, discussion. It has become a model for me with respect to teaching my writing classes, and students respond to it very well. My unit has also been designed with this format in mind. My unit focuses on story-reading, analyzing and writing, which aligns with curriculum goals for the Creative Writing Department in my school.

After the units were completed in July, they were compiled in a volume for each seminar. In October the volumes were deposited in the libraries of all elementary, middle, K-8 and high schools, so that New Haven teachers, whether or not they have been Fellows, might use them in their own teaching. As in the past, the Institute prepared a *Guide* to the new units, based on authors' synopses and recommendations of the grade levels and school courses to which their units apply.

The Institute also updated the *Index* of all the 1488 units contained in the 165 volumes the Institute has published since its inception in 1978. In 2004 one Fellow described the *Index* as "an amazing bank of knowledge" that is "readily available to all teachers." The *Index* and *Guide* also were deposited in all school libraries and distributed to the teachers who serve as Institute Representatives for the schools. A full set of the new curricular resources was provided to those school district administrators who have responsibility for

curricula system-wide. The Institute continued to supply units missing from any collection, based on surveys distributed annually to schools, insofar as the volumes remain in print. As described below, the Institute has also created electronic versions that make its curricular resources more widely accessible.

Results for the Participants

Fellows in 2004, as in past years, spoke of the results of their Institute participation particularly in terms of intellectual growth and renewal. Just as the opportunity to increase mastery of the subject one teaches was an important incentive for most Fellows (86 percent) to take part in the Institute, nearly all (98 percent) said that they had gained knowledge of their subject and confidence to teach it by participating in their seminar. No Fellow disagreed with the statement that the seminar helped with intellectual and professional growth; two thirds of Fellows (67 percent) strongly agreed.

Nearly all said they had gained knowledge of their subject and confidence to teach it.

Many Fellows described the Institute experience — including the research and writing of curriculum units — as having increased their professional confidence and morale, while nourishing their curiosity. One "learned a great deal about different strategies that good readers use and activities that teachers can use to help their students [read]. Not only will I use the lessons I included in my unit, but also I will continue to read professional books that describe these strategies and suggest different activities." Another said, "I feel extremely prepared and confident in teaching this unit, thanks to the information I received from the Institute." A colleague had a similar reaction: "The seminar fits perfectly with my school curricula. . . . I am now better prepared." Another wrote, "The process of reading and writing the unit, based on my personal designs and desires, has been one of the most rewarding learning experiences I've had during teaching." Others said, "I have been rejuvenated by this intellectual exchange," and "I am all fired up to bring the strategies I have created in my unit. . . to my classroom and to the staff at my small school."

One believed "that all of the Fellows in our seminar experienced some real personal and professional growth with [the seminar leader's] guidance." Another returning Fellow said,

This year's seminar convinced me, anew, of the great value of YNHTI for teaching. . . . From our first meeting I was pleased and intrigued by our professor's leadership [and] depth and breadth of insight. It was especially useful to have his wide range of teaching experience and knowledge of pedagogy. . . . Through the seminar I was introduced to a whole new array of writings and resources from which I continue to glean much.

One teacher participating in the Institute for the first-time cited a "professional community" among its virtues. Another — new to teaching — said:

When beginning you spend a majority of time on classroom management, and technique rather than subject matter. The Institute reminds you that you are part of the school system to teach. You are not a babysitter. And the Institute's professionalism instills a kind of pride in your leadership.

Another Fellow wrote:

The Institute experience has caused a genuine shift in my approach: I will approach my content as a teacher/scholar, whereas I had only approached the content as a teacher before. . . . I will ask, What is significant about this topic/text? What do others find valuable about it? How can I craft a learning experience in which students will consider different opinions about this text and then decide what they think?. . . Writing my unit for the Institute taught me one way to approach this set of questions on a practical (as opposed to a theoretical) level.

Fellows spoke, too, of the access to Yale facilities they had gained from participation. From the Institute's inception, all Fellows have been full members of the University community, listed in the directory of faculty and staff, and granted use of facilities and services across the campus. For most Fellows (80 percent) access to Yale's academic facilities such as the library was an incentive for their participation, and 54 percent reported that membership in the Yale community had been greatly or moderately useful to them.

In 2004 the Institute arranged five special campus tours, orientations, or workshops for Fellows, in addition to the program talks and seminars themselves. These special events, conducted by professional staff of the respective facilities, were scheduled on the following dates and in the following venues at Yale:

- March 24, Sterling Memorial Library
- March 31, Electronic Classroom of Cross Campus Library (for online research resources)
- April 14, Beinecke Rare Book and Manuscript Library
- April 28, Yale University Art Gallery
- May 13, Center for British Art

Fellows remarked upon these opportunities. One "really liked all the tours that were offered to Fellows." According to another, "It is a great benefit to be able to use Yale University facilities. I am especially pleased to use Yale libraries throughout the year." Another said, "My ability to negotiate the Yale University libraries and computer system was very helpful when doing my research." A fourth Fellow wrote, "The resources of Yale seemed almost boundless, and access to the libraries, especially the Art and Architecture Library, made the process of writing the unit much more streamlined." Others regarded "the opportunity to use the facilities and resources of Yale



Michael Marsland

"It is a great benefit to be able to use Yale University facilities. I am especially pleased to use Yale libraries throughout the year."

—Institute Fellow

Fellows touring the Beinecke Rare Book and Manuscript Library.

University" as one of the Institute's strengths, and appreciated "feeling a part of the Yale community."

Fellows see the results of the Institute as extending beyond their own classrooms, and beyond the teachers who have themselves personally participated in the seminars. Almost all Fellows said that they plan to encourage or assist other teachers in using the unit they prepared; more than half said they planned to do so with three or more other teachers. As a group, the Fellows planned to encourage or assist a total of 147 other teachers.

As in the past, Fellows discussed the more extended influence the Institute has had, and will have, for themselves and their schools. One indicated that when developing her unit she "had to sit down with my principal and my seventh-grade team and decide what would be most beneficial to my students and fit the school curriculum." After completing the unit, this teacher said her Institute participation "will have an increasingly significant effect on my teaching and school curricula." Another observed, "The standards and objectives of my unit meet school curricula guidelines, and it is my hope that other teachers will also find it user-friendly and helpful for meeting their teaching and learning needs." Another said that "having read and reviewed over 20 books" in preparation of her unit, she now has "a greater understanding of the literature" and "will certainly share my work with others in my school as well as share it with the [district-wide] reading department." A teacher of social studies observed, "My unit will specifically motivate me to work more closely with science teachers in order to understand the scientific aspects of energy." A colleague wrote, "I expect to play a stronger role in the Math Department to promote rigor and higher aspirations among middle and beginning high school students." And another said, "Our school will be impacted by

the tremendous effort made by three other Fellows to write units on this subject and who are at different levels, [thereby] infusing the seminar topic at all levels in the building."

One who emphasized his curriculum unit "originated out of a need that existed in my teaching" said:

My teaching should be of a much higher quality based on my research and time spent planning my unit. I expect that materials I gathered and the lessons I developed will spark the students' interest in a topic which many of them are very curious about. . . . I hope my unit will enable my colleagues who teach civics and U.S. history to present this curriculum in new and creative ways. I plan to suggest to my [district-level] supervisor that those of us who participated [in the Institute] have the opportunity to present our units at one of our monthly city-wide meetings.

Another recognized how the Institute will "give my colleagues and me an interdisciplinary unit to dissect and discuss." He continued:

Through analyzing the strengths and weaknesses of my overall unit and the resulting lesson plans, our collective body of knowledge will be brought to the forefront. I am hopeful that my mistakes and my successes will add to our overall discussion of what constitutes effective teaching and learning.

Every year we are attentive to the responses of both first-time and veteran participants because we want a high proportion of New Haven teachers to

"My teaching should be of a much higher quality based on my research and time spent planning my unit. I expect that materials I gathered and the lessons I developed will spark the students' interest in a topic which many of them are very curious about."

—Institute Fellow



Michael Marland

Fellow Sara E. Thomas teaching her Institute unit to her student at High School in the Community.

become Fellows and we also want the Institute to become a regular part of Fellows' professional lives. Both groups cite their own rewards.

One newcomer, who "was impressed with several of my colleagues' knowledge," said her participation "will have a demonstrable effect on my teaching this year. I was forced to remember what it feels like to be a student; that alone is worth so much." She continued, "I will be so much more careful in my approach and assessment. I will also be able to teach my subject more competently and in depth." Another first-time Fellow believes the unit she developed "will allow me to be the kind of teacher that takes on the role of collaborator and intellectual instigator instead of knowledge-bearing lecturer. This unit will invite my students to become active learners finding success through collaboration." Others wrote:

My experience in the seminar was stimulating intellectually as well as helpful professionally. . . . The obvious strength of the program lies in the ability to share with other teachers experiences, strategies, and even frustrations. The people that participate are what makes the program beneficial. Whenever you get professionals together to communicate their ideas on teaching I think that you are bound to have good things happen. We solved problems together, we helped one another, and we taught each other useful strategies. Our seminar leader kept us focused and challenged at all times. . . . I learned a lot from the other Fellows and from my leader.

Experiences of First- and Second-Year Teachers

Among the teachers who were participating in the Institute for the first time in 2004 twelve were in their first year and four were in their second year of teaching in New Haven. As discussed above in the section of this report on the Fellows' Application and Admissions Process, they were required also to participate in the Beginning Educator Support and Training (BEST) program of the State of Connecticut.

In 2004 the Institute concluded a three-year pilot effort better to involve and support individuals in their first or second year of teaching. During that period, 47 such teachers were accepted as Fellows. Thirty-six of them (77) percent, completed the Institute successfully — precisely the same proportion of all Fellows (140 of 182) who finished the program successfully during that period. The results of the pilot encouraged the Steering Committee to conclude that in the future the Institute should not hesitate to urge beginning teachers to apply to participate.

The Committee reached this decision after evaluating in several ways the Institute experiences of teachers in their first or second year. The Institute:

- reviewed their responses collectively to the annual Fellow questionnaire for all Fellows during 2002 through 2004;

The pilot encouraged the Steering Committee to conclude that in the future the Institute should not hesitate to urge beginning teachers to apply to participate.

- compared in particular the responses of first-year teachers who were Fellows to the responses of other Fellows during that period; and
- examined how first- and second-year teachers responded to additional questions we posed in 2003 and 2004.

The Steering Committee also asked individuals new to teaching who were Fellows during 2002 through 2004 to fill out a special, onetime survey, which the Committee had developed, based in part on new teachers' responses to open-ended questions in the Fellows questionnaire. The Institute circulated this survey to new teachers who became Fellows in that period, whether or not they actually completed the program. (In contrast to the 100 percent response rate of the annual Fellows questionnaire, this special survey elicited a response from about half of those surveyed — 23 of 47.)

The data from these three instruments indicate that the Institute experiences of new teachers resembled those of Fellows overall. Both first-year teachers and other Fellows cited, to a similar degree, the same incentives for and benefits from Institute participation. (See Tables 2 and 3, respectively.)

Table 2

Incentives for Institute Participation, 2002 through 2004*

	First-Year Teachers (n=25)	Other Fellows** (n=115)
Opportunity to work with university faculty	84%	88%
Opportunity for intellectual independence	84%	89%
Develop materials to motivate students	80%	92%
Opportunity to work with teachers from other schools	68%	78%
Develop curriculum to fit my needs	64%	88%

*Percent identifying factor as important

** The median for Other Fellows was 13 years of total teaching experience.

Source: Annual Fellows questionnaire responses, 2002 through 2004

Table 3

Benefits of Institute Participation, 2002 through 2004*

	First-Year Teachers (n=25)	Other Fellows** (n=115)
Helped me grow professionally and intellectually	96%	100%
Gained knowledge of my subject and confidence in ability to teach it	92%	95%
Had ample opportunity to discuss my choice of readings with my seminar leader	84%	86%
Have higher expectation of my students' ability to learn about the seminar subject	80%	94%

*Percent agreeing or strongly agreeing

** The median for Other Fellows was 13 years of total teaching experience.

Source: Annual Fellows questionnaire responses, 2002 through 2004

The Institute experiences of new teachers resembled those of Fellows overall.

The principal incentives that drew first-year teachers to participate were the opportunity to work with university faculty members (important to 84 percent); the opportunity to exercise intellectual independence (84 percent); and the opportunity to develop materials to motivate their students (80 percent). Other reasons the more experienced Fellows regarded as important — such as the 88 percent who cited the opportunity to develop curriculum that fits their needs — were less important to the new teachers (64 percent).

The new teachers and other Fellows also perceived similar benefits. Most new teachers agreed (92 percent, 40 percent "strongly") that seminar participation allowed them to gain knowledge of their subject and confidence in their ability to teach it. Almost all agreed (96 percent, 52 percent "strongly") that participation had helped them to grow professionally and intellectually. Eighty-four percent said they had ample opportunity to discuss their choice of readings with their seminar leader; four fifths (80 percent) said they had a higher expectation of their students' ability to learn about the seminar subject.

As in the previous years of the pilot, several of the 2004 Fellows who were first- or second-year teachers were among the most enthusiastic participants in the Institute. A number of them spoke of what they gained from their seminar colleagues. One said, "Exposure to other teachers in different schools is good for sharing knowledge and experience." Another said, "I was able to collaborate with other teachers with more experience in the community. That was the most important to me." Another wrote:

The Institute has had a great effect on my teaching. . . . This seminar has taught me how to focus more on combining visual learning with literature to get my students more interested in the subject



Fellow David N. Reynolds and his students at High School in the Community.

"The Institute has had a great effect on my teaching. . . . This seminar has taught me how to focus more on combining visual learning with literature to get my students more interested in the subject matter."
—Institute Fellow

matter. It has also opened my eyes back up to the way in which I learn — and how that process may be vastly different from how my students learn. It was excellent to have so many teachers who are so highly involved with their teaching around to share ideas and feedback with. As a result, I will . . . strive to interact with my peers more to share ideas.

According to another, "The Institute helps you discover what other schools are doing around the city," and since especially "as a first or second-year teacher it is important to think critically about your teaching, the Institute constantly reminds you to keep learning and incorporating new techniques." This Fellow continued, "If you became a teacher because you love kids, knowledge, and learning then why would you not be part of the Yale-New Haven Teachers Institute. Essentially it is a place to bounce ideas off veteran and new teachers who, like you, teach for the 'right' reason." Others said:

One of the primary benefits is networking with other New Haven teachers. Many of the informal discussions lead to problem-solving. The weekly seminar meetings allow for opportunities to brainstorm with veteran teachers and to gain knowledge via their experience.

[The Institute] helps you to gather resources and collect your own thoughts on how to teach a specific aspect of your curriculum. Also, having Yale as a resource gives many advantages. . . and varying opinions that can be helpful.

I would encourage other beginning teachers to participate in this program. It is a wonderful way to make connections, continue learning and prepare for the following year.

The advantages of participation in the Institute as a new teacher are many. . . . The diversity and experience of the teachers that are involved in the Institute is wide, making for great discussions and generation of new ideas. Working with a professor on a certain topic helps to explain new content, spruce up content you might not have taught before. Writing a curriculum unit was something that I had actually never done and it forced me to research and organize ahead of time how I was going to teach something.

Regarding the portfolio the State requires beginning teachers to prepare, Fellows in their first year in the district commented:

I plan to use my [Institute] unit as I complete my BEST portfolio. As I wrote it, I had that in mind so that the requirements for the portfolio and the standards, activities and objectives of my unit would line up.

"I would encourage other beginning teachers to participate in this program. It is a wonderful way to make connections, continue learning and prepare for the following year."

—Institute Fellow

I intend to use my unit as my BEST portfolio unit. I made use of a number of the requirements of the BEST program in creating my unit and will therefore be able to use it quite readily.

For the BEST portfolio . . . I expect to use the same subject matter, but condense it into a shorter time frame and perhaps minimize the number of objectives addressed.

My BEST portfolio will be based on the information gathered and acquired as resources for my curriculum unit. My curriculum unit will greatly inform . . . my portfolio.

Another who had "originally" planned "on using the unit for my BEST portfolio" decided for scheduling reasons to alter this plan. "However, I have learned a great deal about the components that a unit must contain, and I have also learned about setting deadlines and adhering to them. I also learned about the wealth of information that is available in the existing [Institute] units and will definitely make use of them when preparing my portfolio."

In addition to completing the annual Fellows questionnaire, teachers who were in their initial years of teaching in New Haven while participating in the Institute during the period 2002 through 2004 were asked to respond to a special questionnaire administered from November 2004 to January 2005. Two-thirds of the 23 respondents said that the Institute had helped them to a great or moderate extent to increase their knowledge of the subject they teach; to work with teachers from other subjects and grade levels; and to introduce them to curricular materials developed in the Institute. Half said the Institute had helped them at least to a moderate extent to receive suggestions and feedback from other teachers, and nearly half said it had improved their time-management and planning skills to a moderate or great extent.

Their comments on the relationship between Institute participation and the BEST portfolio requirements were mixed. While half said the Institute had been helpful in the preparation of their portfolio, fewer said they had used or planned to use their Institute unit for their portfolio. Still, three said they had used it "a lot" in this way, and of the seven who still planned to prepare a portfolio, all but one expected to use their Institute experience in the portfolio's preparation. Half of the respondents said that they had received useful portfolio suggestions and gained knowledge about portfolio requirements.

In short, the special survey affirmed findings from the regular Fellows questionnaire: While Institute participation helped some Fellows fulfill BEST requirements, the Institute's broader appeal appeared much the same to teachers of all levels of experience. Two thirds said they would encourage other first- and second-year teachers to participate in the Institute, and most others said they might, if colleagues were ready for what one new teacher described as "a large commitment." All but one respondent said they would encourage

While Institute participation helped some Fellows fulfill BEST requirements, the Institute's broader appeal appeared much the same to teachers of all levels of experience.

teachers beyond their second year to participate; that individual said "maybe." The following quotations are illustrative:

The acceptance into the Yale community and the chance to learn from some of the best minds in the world is truly a great incentive to young teachers. Also, the Institute provides educators with a community of seasoned teachers who are more than willing to direct younger teachers through a network of helpful colleagues as we try to navigate BEST preparation.

The Institute is a great opportunity to meet other teachers and make contacts at other schools. As a new teacher, you are constantly planning on the fly and trying to come up with ideas for how to execute certain lessons. There is no better way than to talk to someone else that has been there, and done it successfully.

The advantages of participation for first- and second-year teachers are the same as those for more veteran teachers. To develop curriculum with a member of Yale's faculty is a very unique and useful opportunity that few teachers have. For newer teachers, however, there are additional advantages. . . . The Institute as a whole and the individual seminars provide a nice professional and personal environment to get to know fellow teachers. In fact, I have gotten to know teachers from my own school better through my seminars than while working 'together' in our building. The more fellow new teachers one meets in the Institute, the better, as well.

"The Institute was a wonderful experience for me as I entered teaching because it raised my level of pride and made me feel passionately that teaching is an academic and meaningful endeavor."

—Institute Fellow

The Institute was a wonderful experience for me as I entered teaching because it raised my level of pride and made me feel passionately that teaching is an academic and meaningful endeavor. This is important because teachers get so many signs to the contrary, in terms of respect and monetary compensation. [The Institute] provides beginning teachers with lots of peer and professor support, which can be really helpful and encouraging in a difficult first year.

I would encourage anyone with intellectual curiosity to participate, regardless of how long they had been teaching. One man insisted that it would be too demanding for me to be a first-year teacher and participate in the seminar. Although the man had experience, I disagreed with him, and proved myself right. I believe a strong curiosity and desire to learn is most important.

I would recommend (and did!) that teachers participate in the Institute. I found the camaraderie to be very beneficial. It afforded me a community of professionals I could access for information and advice. The first couple of years of teaching are challenging; the built-in support makes the experience better. The chance to learn about a new subject was also very exciting.

Many of the new teachers drew the respect of their more experienced seminar colleagues. According to one longtime Institute participant responding to the 2004 Fellows questionnaire,

One of the biggest positives this year was the recruitment of beginning teachers. For a long time, many have had the feeling that first, second, or even third-year teachers could not adequately balance the demands of teaching with those presented in the Institute. Many young teachers have proven this to be a myth. They have completed worthy units, and some have begun to assume leadership positions in the Institute. At the same time, the Institute needs to . . . try to develop a mechanism to both help [beginning teachers] in making a decision regarding whether to apply and to help them if they encounter difficulties once their seminar begins.

Throughout the pilot period the Institute's leadership, both school Representatives and seminar Coordinators, has been attentive to, and has begun to include, first- and second-year teachers. In fall 2004, five of the Representatives had two or fewer total years of experience in teaching; nine had five or fewer years of experience. One of the 2004 Coordinators was in his third year of teaching, after having been a Fellow and Representative in each of his first two years. We will continue to track the ways in which seminar participation and unit development may assist such new teachers in particular — and will use this information in planning future recruitment and support efforts. We will consider how the teaching of Institute curriculum units should be scheduled in relation to the State of Connecticut's portfolio requirement, and how to provide opportunities for new teachers within the seminars to complement the mentoring structure that the district has established. Two members of the Steering Committee have volunteered for formal training to become mentors to new teachers in the New Haven Public Schools. In this role, they advise and support colleagues both in the classroom and in the creation of their portfolios.

For returning Fellows, the rewards of participation do not diminish over time. The experience becomes cumulative, rather than repetitive or redundant. Many teachers report, in fact, that the rewards increase as one has more experience as a Fellow. As with newer Fellows, many consider the nature of the Institute as a learning community to be a distinct benefit. One returning participant remarked that "the attitude and support of other Fellows. . . kept me going."

Many teachers report that the rewards increase as one has more experience as a Fellow.

Another wrote that "I had an excellent seminar leader and topic, plus great fellow New Haven teachers to work with. Our group was a nice balance of elementary, middle, and high school teachers — rookies and veterans." One of those "veterans" called the 2004 Institute "both productive and stimulating" and was "excited about having a fresh and new curriculum unit." Others said:

It is a great source of pride and peace of mind to know that I am ready to implement something that I have myself prepared and written through months of reading and work. It makes me look forward to a new year in that I am eager to try out the new curriculum and makes my work less monotonous.

The way I approach my teaching of math will be better informed and enhanced by the study I have made of pedagogy from other countries that have high levels of success in mathematics. I will introduce a wider variety of problems and problem-solving techniques in my classes and I will make an effort to get my students to use the Internet more frequently for learning and tutorial help.

Every year since 1990, when they became a regular part of the Institute, elementary school teachers have spoken of the advantages of the Institute for them and their curricula specifically. This year one said, "I was challenged to learn about a topic I would never explore on my own, much less try to develop a unit to enrich a kindergarten curriculum. I enjoyed the professionalism of my colleagues and the standards set by the Institute." A member of a different seminar commented, "Almost everything we covered had connections to elementary reading and language arts, and often to social development, making it pertinent to me as a teacher." Other participants from the elementary grades, as we have noted, commented on the value of working with teachers of older students. Another said,

This seminar gave me the opportunity to incorporate humanities into the content area of language arts, a feat that is otherwise

"It is a great source of pride and peace of mind to know that I am ready to implement something that I have myself prepared and written through months of reading and work."

—Institute Fellow



Michael Marsland

Fellow Pedro Mendia-Landa and his students at Columbus School, demonstrating their prize-winning science fair project that resulted from his participation in the seminar on "Energy, Engines, and the Environment."

unheard of in teaching methodology. Due to the rigorous testing of our students, school curricula — as well as teachers — have become stale and monotonous, reverting to methods of repetition and memorization. . . . [My unit] will prove to be a positive experience because any learning that is active and participatory is experienced and remembered.

Seminar leaders, too, speak of what they gain from participation. They not only perceive their growing involvement in public education and the University's home community; they also recognize benefits accruing to their own scholarship and teaching. One seminar leader this year described seminar discussions as "almost always energetic and insightful" and "livelier than most I've encountered among Yale students." With the Fellows, he sought "a sense of the real-life exigencies involved in transporting our seminar materials to all levels of public education." Another said:

The main benefit I derived was better acquaintance with New Haven teachers, both as individuals and as representatives of the teaching profession. Running the seminar also gave me occasion to reflect on the [teaching of the subject matter]. This will help me on issues of K-12 education. I am pretty confident that the seminar contributed to the knowledge base of the Fellows, and I am hopeful that it contributed positively to their teaching.

Another, calling himself an "enthusiastic supporter" of the Institute, said "I've learned enormously from getting to know" New Haven teachers of elementary and secondary students.

"The main benefit I derived was better acquaintance with New Haven teachers, both as individuals and as representatives of the teaching profession."

—Seminar Leader

Teams of Fellows

Since 1994 the Institute has admitted teams of at least three teachers from the same school to a seminar with the expectation that the team members would work as a team. They would coordinate their curriculum units and work together during the school year, planning cross-grade and cross-department instruction and culminating school-wide activities, such as assembly programs, science fairs, or some kind of publication. Each team member, however, must write a unit that could be taught independently. This program, highly successful in several schools, has encouraged teachers who were previously reluctant to participate in seminars on an individual basis to apply to a seminar as part of a school team.

While no full team of Fellows emerged during the Institute application and admissions process in 2004, two partial teams did apply. In addition, a team from Beecher Elementary School that had participated in a 2003 seminar on poetry held two assemblies in 2003-04 where students dramatized poetry narratives and joined teachers working with puppetry and music. The 2004 Fellows with team components included two from a small new high school,

New Haven Academy, whose sole teachers of science and special education worked together in the seminar on "Energy, Engines, and the Environment." Both of those teachers were in their first year in the district, and one went on to become her school's Representative in fall 2004. Informal teams at schools such as Columbus Family Academy involved Fellows in developing complementary curriculum units to engage students and raise the Institute's profile among their colleagues.

Benefits for Students

The ultimate purpose of the Institute is to strengthen teaching in New Haven's public schools and in this way to improve student learning.

The ultimate purpose of the Institute is to strengthen teaching in New Haven's public schools and in this way to improve student learning throughout the schools. Contrary to what some would expect of a partnership involving Yale University, the Teachers Institute intends to serve students at all achievement and performance levels. Fellows often, in fact, write their units for students at more than one level. While most Fellows (94 percent) reported that their new curriculum units were designed for their "average" students, two thirds (70 percent) reported that they were designed for their "advanced" students and a similar proportion (66 percent) reported that they were designed for their "least advanced" students.

Teachers commented on these multiple purposes. One believed her unit "to be highly motivating"; it "will allow children to feel successful reading books on their own independent levels." Another Fellow, attentive to "the needs of my lower-level readers," is now "empowered to meet those needs right from the start. Writing this unit forced me to take a close look at the link between my curriculum and my students. Instead of hoping that the prescribed curriculum will 'fit' the varying needs of my students, I know that I have created a curriculum that will 'fit' the needs of all my students." She continued:

[The unit] will not only leave students with a sense of confidence in their critical-thinking skills, but provide them with opportunity after opportunity to hone those skills and thus better prepare them for future literary activities and future standardized tests. Teaching this unit will meet all district and state-level curriculum requirements. More importantly, it will meet the needs of all learners.

The plans of several Fellows illustrate the wide range of unit use anticipated in the schools. An English teacher "will now be able to help students develop a richer understanding." She said that "Instead of simply pointing out the literary elements, students can explore better the motivations of the authors. Additionally, I can enable them to make more connections between themselves, their world and the material. . . . The seminar provided me with a means to make my curriculum more accessible and exciting for my students." A math teacher commented, "My students should benefit from my desire to make their learning more engaging, exploratory, and authentic — goals I have always aimed for, but toward which I can now see several new paths."



Michael Marsland

“Students will be improving their powers of observation, gathering facts, making predictions, and drawing conclusions, all skills that will be assets in other academic subjects, as well as tools to be used in their life experiences.”

—Institute Fellow

Fellow Sharron Solomon-McCarthy with her students at Betsy Ross Arts Magnet School.

A number of Fellows commented on the significance of the Institute for students learning the English language. One teacher explained that her unit "will allow me to meet the needs of my English language learners and provide them with alternative strategies to enhance their comprehension skills" while also giving these "learners appreciation of literature and the confidence to select an appropriate text." A teacher of the blind and visually impaired said, "The students will gain an understanding of the laws that pertain to their disabilities and the way these rights are enforced by the Supreme Court." Other Fellows wrote:

Students will be improving their powers of observation, gathering facts, making predictions, and drawing conclusions, all skills that will be assets in other academic subjects, as well as tools to be used in their life experiences.

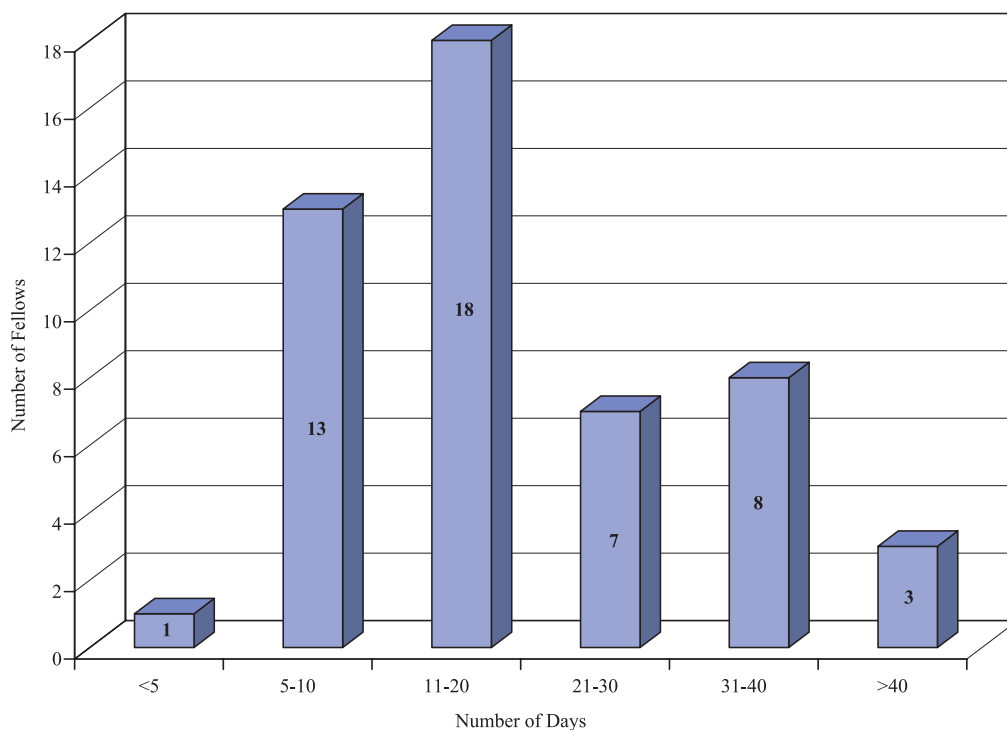
My students will be able to master the fundamental concepts of energy and engines and will continue to ask questions about how things work in the world around them. Students will know where the energy they use every day comes from and how it is formed.

My unit effectively combines art and the social studies. Learning the skills of art analysis enables me to transfer that ability to my students so that not only will they be able to critically examine and write about a piece of art, they will also be able to see society represented in art. In the end, I hope they simply appreciate the art of painting more than they did before. After my seminar, I do.

To attempt to gauge the impact of this year's units in New Haven classrooms, we asked Fellows about the number of students to whom they planned to teach their new unit, and on how many days. Forty-five of the Fellows planned to teach their unit to 20 or more students; 20 said that they would teach their unit to 50 or more students. The total number of students to be taught a unit by this year's Fellows is almost 2300. Chart 6 indicates the lengths of time the Fellows planned to teach their units. For almost all Fellows, the unit is a significant part of their teaching plans.

Chart 6

Number of Days 2004 Fellows Plan to Teach Their New Unit



*For almost all
Fellows, the unit is a
significant part of
their teaching plans.*

As in past years Fellows were optimistic about the responses they anticipate receiving from their students to the material they had studied and developed in the Institute. Nearly all (96 percent) of the Fellows responding agreed that, as a result of Institute participation, they have a higher expectation of their students' ability to learn about the seminar subject. We have already quoted Fellows who spoke about what they gained, how their own enthusiasm for a subject would motivate students, and how they planned to involve students more actively in classroom learning. Another observed, "I am now able to better mentor students who wish to do a Science Fair project about engines," while a colleague wrote: "My interest and enthusiasm for this unit will be contagious and . . . I will be able to provide my students with a very positive learning experience." Another said:

My students will have a great opportunity to learn about literature and history in this interdisciplinary unit. It brings the sometimes-daunting writing process to them in a different way — through the

eyes of social change. This may be just the added impetus that some of them need to engage more in their own writing and the ability to express themselves clearly.

We also asked Fellows who had participated in prior years to report on student responses they had actually observed when teaching units developed in the Institute. Their retrospective comments resembled their optimism about using their new units. One said, "I participated in the Institute last year and the curriculum unit was a success among the students," because they enjoy "the quest for knowledge. They feel validated when their suggestions are considered in developing the units." Another cited the role of a previous seminar that "continues to affect the content and style by which I teach," and "which led me to start a model UN club and begin an elective class in international relations," allowing "young people to gain communication skills while they enhance their academic understanding of global issues." According to another, "This curriculum unit greatly assisted my students in understanding environmental issues in their community." Another said, "I have done case studies in previous seminar units. Students love to read about the facts of a case and then try to figure out the decision of the Court as well as how they would decide a case. Such an activity lends itself extremely well to group discussion and allows the lesson to be student-centered." Others wrote:

My previous two seminar experiences both led to the creation of new interdisciplinary courses in my high school. I directly applied the seminar unit to develop a semester-long block course which I taught with a co-teacher. One of these courses was taught for only one year; the other was a feature in the school's science and English



Michael Marsland

Fellow Crecia C. Swaim teaching her Institute unit to her students at Betsy Ross Arts Magnet School.

curriculum for four years. The units continued to be used in parts of my instruction for about ten years.

The Institute has been very satisfying for me and for my teaching. I enjoyed working on the curriculum unit and have seen whole or parts of the units I have done used on a regular basis. I have used parts of the unit I did on architecture when teaching about the community, and units in water and the environment have found their way into science lessons. . . . The units have made some of the topics that we cover more enjoyable and interesting for my students. I know that working on these various units has broadened my teaching perspective and my confidence.

My previous unit helped me better integrate expository writing skills in my social studies classroom. I've emphasized writing more because I know a bit more about organization and style. . . . I am a better writer because of the seminar, and I often reflect on the advice gained from [the seminar leader]. I think my students have benefited because I have more confidence to comment on their writing and encourage greater effort.

My students have always enjoyed the Institute units that I have taught them. Of course, with their feedback I learn to fine tune many aspects of the unit as well as to add new ideas and activities. The unit I developed last year, for example, was a wonderful vehicle for teaching poetry to my third graders. As a result of all the research I had done on how to teach poetry, I approached the subject with more confidence and greater ease. . . . I was able to meet certain curriculum standards through the teaching of my units, using materials and activities that I have developed. I have also learned to tap as resources other Institute curriculum units for various subjects I have taught. There is such a wealth of ideas in those units.

Although I am an English teacher, participating in a diversity of seminars in the Institute has opened doors and windows of learning about other disciplines that I am eager to pass on to my students. . . . Once I had taken a seminar that made use of visual art, it really changed the way I created curricula. Two seminars gave me exhilarating units: one on the Harlem Renaissance that culminated in forty paintings, by my students, of reproductions of art from the Harlem Renaissance, framed and exhibited in downtown New Haven; the other a unit on children's literature for high school students culminated in each student following a process by which he or she created his or her own children's story book. There were regular trips to the . . . New Haven Public Library, and out to elementary schools to read to children, that my very grown-up high school students loved.

"I was able to meet certain curriculum standards through the teaching of my units. I have also learned to tap as resources other Institute curriculum units for various subjects I have taught. There is such a wealth of ideas in those units."

—Institute Fellow

My participation in the Institute was one of the most meaningful and important events in my professional career as a teacher. I have used the units I developed every year since I wrote them with great success. I have shared the ideas from the units with colleagues on several occasions. . . . Since I teach at a small school, any time a teacher is able to develop exciting and effective curriculum it has an impact on a significant proportion of the students at the school. Because of the ongoing situation with respect to the war on Iraq and the wider war on terrorism, the unit has continued to be timely and vital and of great interest to students.

The Institute has made a huge difference in my teaching and my ability to continue to stay creative amidst the constant demand for teachers to 'teach to the standards' and 'adhere to the textbook.' The Institute, and the experiences I have had among colleagues, Yale professors and in my own research, has helped me define who I am as a teacher. The Institute experience and the units I have produced have enabled me to realize my potential as a teacher. . . . Some of my most memorable conversations have occurred with students as we have talked about highlights of a quarter or semester. Very often the lessons my students remember as most fun or memorable will be ones I created as a Yale Fellow. On many occasions I have personally shared single lessons or entire units with my colleagues, usually with great success. Our school has an emphasis on interdisciplinary teaching; we have used the Yale units to foster teacher collaboration and even team teaching.

"Very often the lessons my students remember as most fun or memorable will be ones I created as a Yale Fellow."

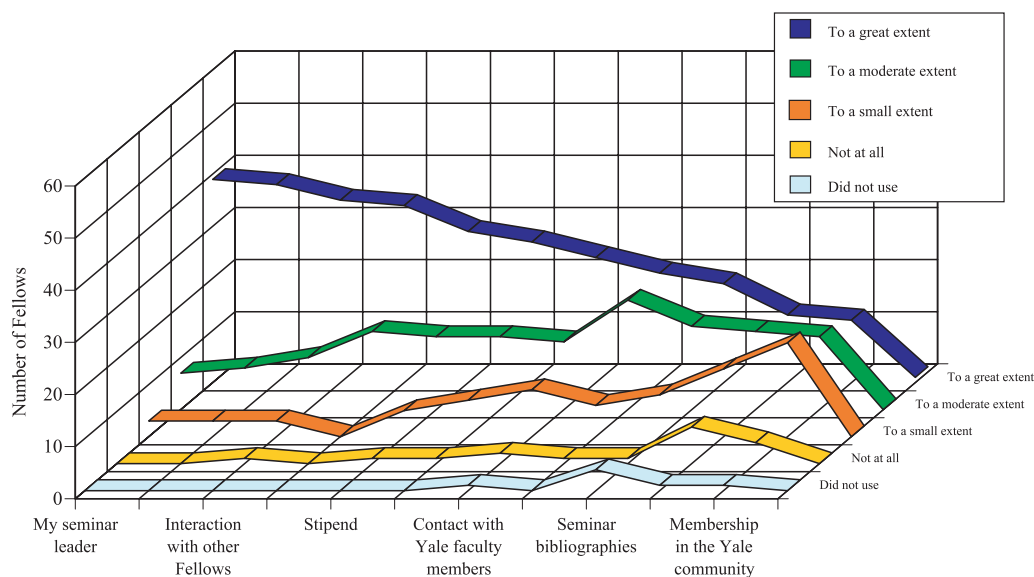
—Institute Fellow

Participants' Conclusions Overall

We asked Fellows about the extent to which several features of the Institute had been useful to them. As shown in Chart 7 below (reading again left to right from the most useful to the least useful), very few Fellows said that any aspect of the Institute had not been useful. In fact, except for computer assistance — which many did not use — each aspect of the Institute was regarded as useful to a great or moderate extent by well over half of the Fellows. Almost all (94 percent) responded that favorably about their seminar leaders and the knowledge gained about their subject, ninety-two (92) percent about the interaction with other Fellows, eight in ten (84 percent) about the guidelines for writing a unit, and about the seminar bibliographies (80 percent). Every Fellow rated the program overall as useful at least to a moderate extent; two thirds (69 percent) called it useful to a great extent.

We asked seminar leaders to provide their overall conclusions about the strengths and weaknesses of the Institute. One said that the Fellows' curriculum units were "remarkably rich. Taken as a whole, they provide an impressive array of teachable material that validates the purpose of the Yale-New Haven Teachers Institute." Calling his "involvement in this enterprise" both "impor-

Chart 7
Program's Usefulness to the 2003 Fellows



tant and satisfying," another seminar leader spoke of a "sense of making some contribution to the education of public school students in New Haven, and supporting the work of incredibly dedicated teachers" who "take considerable academic and personal advantages" from the Institute. "Overall," he said, "this is a wonderful program."

We also asked Fellows to offer their conclusions about the strengths and weaknesses of the Institute. Some individuals answered very specifically, while others responded more generally. One cited as "the only weakness" that "some applicants are not thoroughly informed about the workload and obligations of a Fellow." This participant spoke also of "many strengths": "[The Institute] provides teachers with opportunities for intellectual stimulation, with a forum for the exchange of ideas and with a chance to develop materials tailored to their students' needs and interests."

Positive comments touched upon a range of features. According to one Fellow, "The Institute is very well-organized, structured, rewarding, and challenging." Another who enjoyed "access to the Yale facilities and faculty" found the Institute staff "to be accommodating and willing to find out about anything Fellows needed for their units." Another highlighted "the opportunity to work with Yale professors who are leading scholars in their field." One teacher listed many strengths, from the "expertise of seminar leaders" and "enthusiastic support of previous seminar participants" to the "opportunity to learn from and commiserate with colleagues" and the "development of new contacts not only at Yale, but also at other New Haven schools." Another, calling the seminar leader "a great professor," said, "Overall it was fabulous."

One Fellow's "only concern with the Institute is the vast commitment that is required to do the tasks well." This individual observed, "The Institute is

"The Institute is very well-organized, structured, rewarding, and challenging."
—Institute Fellow

very supportive of the Fellows in the writing of their units if that support is needed and sought out. Questions are encouraged, and people seem always available to provide assistance. People involved are friendly, and a collegial environment is present." Others said:

The Institute provides a unique opportunity for teachers to engage in either their own subject or interdisciplinary studies with colleagues across New Haven and a member of the Yale faculty. These are its greatest strengths and in my experience this has been true in previous years. I have been delighted and impressed with the commitment and interest that faculty seminar leaders have consistently demonstrated in the seminars which I have taken. The Yale professors have provided role models for the complex art of working with a whole seminar group while paying close attention to the needs of individual members of that group.

Students have commented that they have learned a lot as a result of my participation in the Institute (classroom instructions, curriculum units, group process, and leadership). They stated, "Teachers in the YNHTI are different from other teachers because they develop curriculum and go to school like us." Students appeared to enjoy the notion that teachers are learners. Teachers ask for help with research, planning, and implementing classroom management. Administrators use collective knowledge and wisdom to advance the school program through vision, goals, planning, and shared resources. All these attributes lead to successful implementation of school-wide initiatives. . . . In short, students, school, and curriculum have benefited.

Aside from a few concerns about details of scheduling and procedures and despite several Fellows' mixed experiences to which we have alluded, the Institute's offerings were very well received overall. Fellows almost uniformly expressed appreciation, and often enthusiasm, for the program.

In their evaluations, almost all the Fellows said they would participate (62 percent) or might participate (34 percent) in the Institute in one or more future years. These proportions are similar to those in prior years. Only two Fellows said they did not intend to participate in the future; both planned to retire soon.

Electronic Resources and Assistance

From the Institute's inception, Fellows have been full members of the Yale community with access to resources throughout the University. For a decade the Institute has been exploring how computing can enhance its partnership, in part because computing is a non-hierarchical form of communication consistent with the collegiality that is a tenet of the Institute's approach. The Institute

"The Yale professors have provided role models for the complex art of working with a whole seminar group while paying close attention to the needs of individual members of that group."

—Institute Fellow

has offered direct computing assistance from its own office; in addition, Fellows may use the facilities at the Yale Computer Centers that serve all members of the University community. Because of the benefits of having the curriculum units online, the Representatives had decided that, beginning in 1999, Fellows must submit their curriculum units and *Guide* entries in electronic as well as printed form. Since 2002 Fellows have been encouraged to submit their first drafts as well as their second and final drafts in electronic form, so as to give the computer assistant an early opportunity to review formatting and offer guidance.

The electronic resources and services available to Fellows include many opportunities to learn about and use computing.

The electronic resources and services available to Fellows include many opportunities to learn about and use computing, regardless of previous experience and expertise, as well as a University Network ID and password for each Fellow. The Yale Library sponsors a series of hands-on computer classes each semester in the Electronic Classroom in Cross Campus Library. Beyond such workshops, and beyond support provided through the checking of the disks on which curriculum units would be submitted, a number of the Fellows sought additional assistance. In 2004 Fellows received help on topics including getting started with computing, setting up an e-mail account, getting started on the Internet, using the Internet in research and teaching, and using Institute resources on-line. With staff from the University Library, the Institute conducted a workshop for Fellows on March 31. This session featured an overview of Internet search engines; exploration of curricular resources available online through the Institute's Web site; and guidance on how to use online research tools of the Yale libraries, including databases and online journals.

The Fellows also sought computer assistance individually with word-processing, formatting and file handling for the preparation of curriculum units. An increasing number of Fellows asked about how to incorporate graphics, including tables and images, into what would become the printed version of their units. One quarter (27 percent) of the Fellows made use of assistance in person, one quarter by phone, and nearly half (45 percent) by e-mail. These percentages reflect Fellows' increasing familiarity with e-mail as well as an encouraging tendency for them to have sufficiently mastered the kinds of skills for which in earlier years more participants had sought assistance. For half (52 percent) of Fellows the availability of computer services was an incentive to their participation. Most Fellows who did not use the computer assistance said they did not need it because they had previously acquired sufficient computer skills, or because they had other resources at home or school. A few said they did not do so because of time constraints during the school year.

Those individuals who did take advantage of the assistance spoke favorably. One Fellow said: "It is very important to have computer assistance available for teachers — especially those who have limited knowledge of computers and the Internet." A second characterized the computer assistant as "always

very helpful and understanding." Another, in her prior year in the Institute, appreciated when the seminar leader had invited the group "to the computer lab where we were given the opportunity to learn the ins and outs of the Yale computer system." As a result, "This year I did not need the computer assistance. . . because last year I used it extensively." Another said, "The Institute always made me feel like I had a solid support team, both technical and personal, behind me."

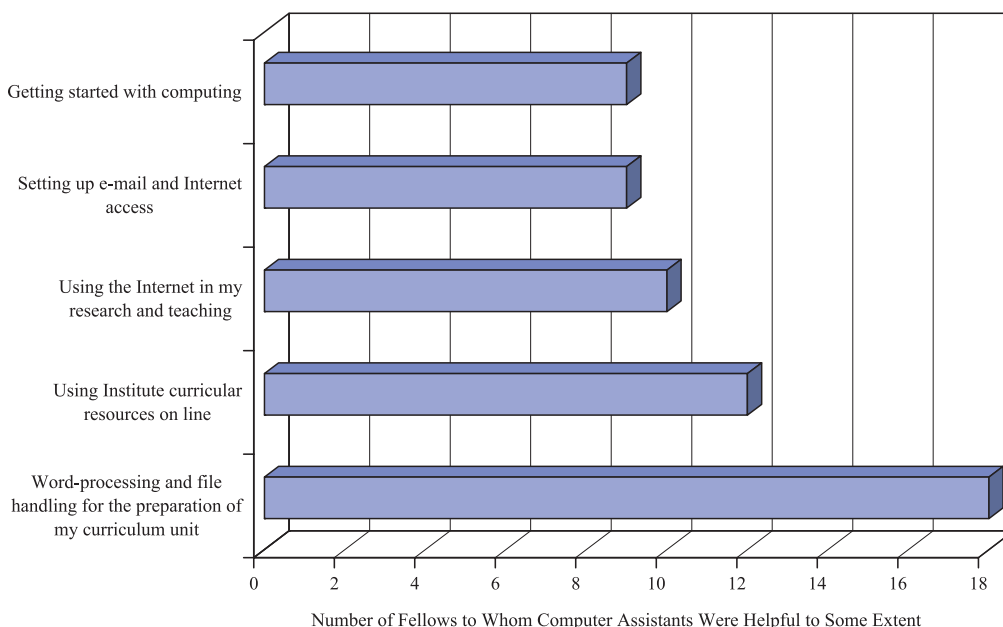
This year the Institute equipped each seminar with its own e-mail list-serve group to facilitate communication among members. One seminar leader chose also to use the Yale's online Classes tool, an electronic forum for posting and viewing documents. Membership in the University community, including a computer Network ID, was a benefit that Fellows explicitly cited. According to one, "Obtaining an assigned Yale ID and computer account proved to be useful when researching information for my unit." A colleague similarly found "instructions for connecting to Yale computing through the proxy server very easy to use, and was very glad to have this access. I used this access a great deal during the process of writing my unit."

"The Institute always made me feel like I had a solid support team, both technical and personal, behind me."

—Institute Fellow

Of the Fellows using the additional computer assistance that the Institute provided, eight found the assistant helpful in getting started with computing; nine found him helpful in setting up e-mail and Internet access; twelve found him helpful in using the Institute's curricular resources on-line; ten found him helpful in using the Internet in research and teaching; and eighteen found him helpful in word processing and file handling for the preparation of a curriculum unit. (See Chart 8.)

Chart 8
Computer Assistants' Helpfulness to the 2004 Fellows



Institute Centers for Curriculum and Professional Development

In 1996 the Institute undertook with the New Haven Public Schools a new program designed to broaden and deepen its efforts to strengthen teaching and learning in the schools. It offered several elementary, middle, and high schools the opportunity to establish an Institute Center for Curriculum and Professional Development within their buildings. Five such Centers were established in 1996. Over subsequent years the Institute has articulated and refined the concept of the Centers, prepared policies and procedures for them, and designed, constructed, and delivered special furnishings to them.

The Institute aims to situate the Centers around the city, targeting especially the larger schools, so that a majority of New Haven teachers will have a Center at their school or at a school near them. During 2004, ten Centers were in operation. They were located at three elementary schools (L. W. Beecher, Columbus, and Davis Street Magnet), one K-8 school (Roberto Clemente), one middle school (Fair Haven), and five high schools (Cooperative Arts and Humanities, Hill Regional Career Magnet, Hillhouse, Wilbur Cross, and Sound Magnet).

These Centers are not permanent installations but must be regularly renewed. A Center may remain in a school so long as the school has a need and desire for it, and can then be moved to another school. In 2004, Columbus became a Center school for the first time. Moving Centers from school to school in this way increases citywide exposure to the Institute. The Steering Committee, which makes these decisions, has developed criteria for targeting sites. A suitable site must be of sufficient size, with a critical mass of participants and adequate leadership. It must be able to rely upon a favorably disposed school administration and an appropriate school plan, and be consistent with the aim of allowing most New Haven teachers to have a Center at their school or nearby.

The Institute and the New Haven Public Schools jointly established Institute Centers as a component of curriculum reform efforts system-wide. The Centers carry out school-based plans to address the District's "Kids First" goals for student learning, whose strategies include enhanced, standards-based curriculum and instruction; greater staff development; increased parental and community involvement; and improved physical condition of schools. Complementing these priorities, the Centers attempt to create in schools a place conducive to the kinds of conversations teachers have with one another and with their Yale colleagues in Institute seminars. Centers are intended to increase the visibility and use of Institute resources and include teachers who have not before been Institute Fellows. Teams using these facilities disseminate Institute-developed curriculum units more widely, familiarize teachers with online curriculum units, and apply the Institute's principles in new ways within the school environment itself.

The Centers attempt to create in schools a place conducive to the kinds of conversations teachers have with one another and with their Yale colleagues in Institute seminars.

The Centers therefore operate from attractive and properly equipped rooms in the schools themselves, containing special furnishings designed by Kent Bloomer, Adjunct Professor of Architectural Design at Yale, who has led two Institute seminars. Bloomer has designed for each Center two pieces of furniture that will remind the users that a Center is a way of bringing teachers together, and that it is a function of the mutual presence of Yale in the schools and the schools in Yale. Combining utility and symbolism, these pieces have a solidity and elegance in harmony with the tradition of design at Yale University, and an evident durability suggestive of the Institute itself. One piece is a round table, with a hole in the middle, which provides the "center" about which eight people can sit. The center of the table is filled with a circular design, the Yale-New Haven Teachers Institute logo multiplied as a continuous fret, which is done in tile and set in cast metal for permanence. The second piece is a very high bookcase, designed to hold volumes of the curriculum units and other Institute materials, with hand-plated inlay work across the top that carries the same continuous fret depicting the Institute logo. A banner continues the logo of the fret into the room.

Most Centers contain at least one computer with an Internet connection so that the teachers have easy access to the Institute's Web site and other online resources. Certain Centers have a high-speed connection and are equipped with scanners and other accessories.

Schools interested in becoming a Center site must apply to the Institute's Steering Committee. One member of the Institute's Steering Committee (at the same school level) is assigned to work with each Center's Coordinating Team.



Michael Marsland

Institute Center for Curriculum and Professional Development teams meeting held at Columbus Family Academy. (Left to right: Center team members Pedro Mendia-Landa, Vivian Lynch, and Waltrina Kirkland-Mullins.)

During 2004 the Steering Committee reviewed reports and renewal applications from the Centers and then organized several meetings of Center leaders and team members. These sessions occurred on May 20 at Career High School; September 22 at Columbus Family Academy; and December 15 at the Institute's offices. The meetings provided an opportunity for the Steering Committee to relate findings from periodic reports and to orient teachers new to the Center concept. The conversation elicited ideas and experiences at various schools, and encouraged ways for Centers to work together. Among the topics addressed were the Reference Lists that were earlier products of Center activity. These documents — one aimed at primary and the other at secondary grades — highlight connections between hundreds of Institute-developed curriculum units and the academic standards and curricular priorities of the New Haven Public Schools.

An area of emphasis was the Centers' value in supporting new teachers, who in some cases — from Fair Haven Middle to Career High School — have already demonstrated that the Institute resources available in Centers can help interest teachers in becoming Institute Fellows and in using those resources in their teaching.

At Davis Street School, one teacher who was a Fellow in 2003 while in her first year of teaching became her school's Representative in 2004 and joined the Center team, giving greater prominence to her Institute-developed unit on the physics of flight. The Center Coordinator at Davis Street continues to teach her Institute units on subjects including astronomy, for which her students earned first place at the citywide Science Fair for their study of rockets. Both Fellows have involved colleagues in teaching various Institute units — during school and in an after-school program. Geography and New Haven history are among the topics that teachers have pursued using these units. The library media specialist, also a former Fellow, is a member of the Center team who introduces Institute resources to new teachers, among others. Three Davis educators, including one in her second year in the district, planned to apply to Institute seminars in 2005. According to the Coordinator, who was the district's teacher of the year for 2003-04:

“Our children are excited and engaged when YNHTI curriculum units are implemented. Because of these teacher-created/teacher-introduced resources, our students get a broadened view of the world. They are enthusiastic about learning.”

—Center Coordinator

Our children are excited and engaged when YNHTI curriculum units are implemented. Because of these teacher-created/teacher-introduced resources, our students get a broadened view of the world. They are enthusiastic about learning. Activities are monitored; follow-up tests are given; and achievement [occurs]. Student work is showcased, and a sense of academic accomplishment permeates the school environment. The implementation of the geography, flight, and New Haven units coincided tremendously with school goals.

The Center in Beecher School has also encouraged colleagues who have not yet been Fellows to teach Institute-developed units. Units exploring Mexican families and Chinese families through literature have elicited the col-

laboration of the three first-grade teachers. In addition in 2004, the Center Coordinator teamed with a fifth-grade teacher to present an extended-day class on learning African American history through poetry. Another fifth-grade teacher drew upon Institute units on literature and Native American history, and shared this material with other colleagues. Music and art teachers have been involved, as well, and the school principal is a former Fellow who is supportive. According to the Coordinator, "Teachers, administrators, staff, parents, and students continue to speak highly of Beecher's Center activities. Two students from last year's culminating activity on poetry have approached asking if there was going to be a program this year."

Preparation for the Program in 2005

From June through August the Institute identified and approached the 80 teachers who would serve during the 2004-2005 school year as the 21 Representatives and 59 Contacts for their schools. During 2003-2004, 73 teachers had served in these ways, 21 as Representatives and 52 as Contacts. Representatives were selected according to recommendations of the teachers who served as seminar Coordinators and conversations they had with persons who had served as Representatives in the past, with other Institute Fellows, and with some school principals. Because the Coordinators had become acquainted with all current Fellows, this mode of selection assures that all Fellows receive consideration for leadership positions. Among the Representatives for 2004-2005 were four teachers in their second year in New Haven and one in his third year, reflecting the Institute's efforts to cultivate new leaders while maintaining the participation of experienced Fellows.

Teacher leadership in the Institute is proportionate to the number of schools at each level. During 2003-2004, 25 (34 percent) of the Representatives and Contacts were from elementary schools, 13 (18 percent) represented K-8 schools, 12 (16 percent) represented middle schools, four (6 percent) represented transitional schools, and 19 (26 percent) represented high schools. A shift toward K-8 schools within the district is reflected in the slight increase of teacher leaders from those schools. In 2004-2005, 22 (28 percent) of the teacher leaders represent elementary schools, 18 (22 percent) represent K-8 schools, 14 (18 percent) represent middle schools, four (5 percent) represent transitional schools, and 22 (28 percent) represent high schools.

Every school had at least one Contact or Representative to serve as a conduit for information to and from the Institute throughout the school year. Of the Representatives and Contacts, about 28 percent were black non-Hispanic, 62 percent were white non-Hispanic, and 8 percent were Hispanic — percentages that approximate the demographic composition of teachers in the district at large. Representatives attend meetings every other week from September to March. They receive an honorarium for this work and agree in advance to participate in the program they are planning, whereas Contacts perform many of

Every school had at least one Contact or Representative to serve as a conduit for information to and from the Institute throughout the school year.

the same functions but are not required to participate in bi-weekly meetings or to commit themselves to Institute participation. Through the Representatives and Contacts, the Institute ensures that all teachers throughout the school district may have an effective voice in shaping a program of curricular and staff development in which they will then have the opportunity to take part.

The Institute provided an orientation for new Representatives on September 9, and the first full meeting of Representatives for the new school year was held September 14. On September 28, a reception for Representatives and Contacts attracted additional teachers, including several who were new to their Institute responsibilities after having been recruited by experienced Fellows. The Representatives met twice monthly with the Director and Associate Director. Between meetings, the Representatives communicate by phone and through school visits with the Contacts for whom they serve as liaison to the Representatives' committee. In these ways, their meetings compile information from, and distribute information to, teachers throughout the New Haven schools.

By the end of December the Representatives had decided to offer the following five seminars for 2005: "Stories around the World in Film and Literature" (Dudley Andrew, Professor of Comparative Literature and of Film Studies); "The Challenge of Intersecting Identities: Race/Ethnicity, Gender and Nation" (Ange-Marie Hancock, Assistant Professor of Political Science and of African American Studies); "Architecture in the Imagination: Place, Memory, Poetry" (Dolores Hayden, Professor of Architecture and of American Studies);

Through the Representatives and Contacts, the Institute ensures that all teachers throughout the school district may have an effective voice in shaping a program of curricular and staff development in which they will then have the opportunity to take part.



Michael Marsland

School Representatives meeting: (Clockwise from top left: Representatives Raymond W. Brooks, David N. Reynolds, Diane M. Huot, Alexandra Reyes, Jean E. Sutherland, Joanne R. Pompano, Lisa A. Omark, Sandra K. Friday, Stephen P. Broker, Jennifer Flood, Justin Boucher, Crystal P. LaVoie, Dyanne D'Angelo, and Mnikesa F. Whitaker; Director James R. Vivian; and Representative Kristen A. Borsari.)

"The Sun and Its Effects on Earth" (Sarbani Basu, Associate Professor of Astronomy); and "Ecology and Biodiversity Conservation" (Oswald Schmitz, Professor of Population and Community Ecology).

Local Program Documentation and Evaluation

Annual evaluations of the Teachers Institute indicate that it assists teachers and schools in specific ways, and that the results are cumulative. (See in particular *A Progress Report on Surveys Administered to New Haven Teachers, 1982-1990* [New Haven: Yale-New Haven Teachers Institute, 1992].) In the fall of 2004, the Institute updated its continuing study of New Haven teachers who have been Fellows. This study notes the proportion of eligible teachers from each New Haven school and department who have participated, the number of times Fellows have completed the program, and whether Fellows have remained teaching in New Haven. It revealed that, of the 580 New Haven teachers who have completed the program successfully at least once between 1978 and 2004, two hundred and fifty-four (254), or 44 percent, are currently teaching in New Haven. (Please see the Appendix for a list of all Fellows from 1978 through 2004). An additional 24 (4 percent) are currently in full-time administrative posts in the school system. Thus 278, or almost half, of all Fellows since 1978 are currently working in the New Haven Public Schools. If we focus on more recent Fellows, sixty (60) percent of those who have been Fellows since 1995 are still teaching in the district, while seven others are in full-time administrative positions in New Haven. These statistics are encouraging given the Institute's determination to involve individuals who will continue to serve students in our urban district.

*Almost half of all
Fellows since 1978
are currently working
in the New Haven
Public Schools.*

As Table 4 shows, 14 percent of current elementary grades teachers in New Haven have completed successfully at least one year of the Institute. As Table 5 shows, 32 percent of New Haven high school teachers of subjects in

Table 4
Institute Fellows as a Percentage of Eligible
New Haven *Elementary* Grades Teachers

Kindergarten	8%
Grade 1	9%
Grade 2	7%
Grade 3	4%
Grade 4	12%
Grade 5	10%
<i>Total K - 5*</i>	14%

*Includes all other subjects, for example non-graded arts, special education teachers, librarians and certain curriculum coordinators. K-5 teachers in K-8 schools are included in the appropriate categories here, and the total also includes K-8 librarians, special education teachers, curriculum coordinators and those K-8 art teachers who teach grades K-5.

Table 5
Institute Fellows as a Percentage of Eligible
New Haven *Secondary* School Teachers

	Middle Schools**	High Schools	Transitional Schools	Overall
English	36%	32%	0%	33%
History	23%	32%	0%	27%
Languages	17%	20%	50%	21%
Arts	24%	24%	0%	23%
Math	16%	18%	0%	17%
Science	21%	22%	20%	22%
Grade 5*	14%	n/a	n/a	14%
Grade 6	13%	n/a	n/a	13%
Grade 7	33%	n/a	n/a	33%
Grade 8	13%	n/a	n/a	13%
Total***	30%	32%	24%	31%

*Grade 5 teachers are included here for middle schools only; grade 5 teachers in elementary schools and K-8 schools are reported in Table 4.

**All K-8 school teachers of the subjects listed here count as Middle School teachers. K-5 teachers in K-8 schools count in Table 4.

***Includes teachers of interdisciplinary and other subjects. Art teachers from K-8 schools are placed based on the grades which they teach most often.

n/a = not applicable

the humanities and sciences, 24 percent of transitional school teachers, and 30 percent of middle grades teachers have also done so. A number of teachers have participated for two to twenty-three years. Of those Fellows still teaching in New Haven, 48 percent have participated in the Institute once, 26 percent either two or three times, 19 percent four to seven times, and 7 percent eight times or more.

In addition, there are now 24 administrators in the New Haven Public Schools who have participated as Institute Fellows for periods of one to twenty-one years. The presence of former Fellows in positions ranging from Assistant Principal and Principal at the school level, to Associate Superintendent and Curriculum Supervisor at the district level, has made the Institute more visible, and has encouraged other teachers to participate in this program. In fall 2004, ten of the district's forty-seven schools had former Institute Fellows as their principals; an additional nine schools had assistant principals or instructional coaches who were former Fellows. Overall, four in ten New Haven schools had former Institute Fellows in leading administrative roles. One example is Career High School, an Institute Center school, whose principal and assistant principal had been Fellows and whose teachers by the fall were showing increased interest in participating as Fellows in 2005.

In fall 2004, four in ten New Haven schools had former Institute Fellows in leading administrative roles.

In 1996 members of the National Advisory Committee had suggested that the Institute engage in fuller documentation of its work beyond the seminars themselves, and of the wider effects of its program in the school system. They believed they were hearing from teachers and staff about many valuable results of the Institute's work that should be documented in forms that could be made more widely available. The Institute is therefore now documenting more fully the work of teams in the schools, the activities of the Centers, and the development of electronic resources. This documentation has been summarized elsewhere in this report.

This Annual Report itself is a massive compilation of information and statistics drawn from a variety of sources, including the questionnaires completed by Fellows and seminar leaders; reporting by school Representatives and Institute Center leaders; the tracking of all previous Fellows; statistics from the New Haven Public Schools, demographic analyses; minutes of meetings; project reports; reports from the Centers; reports to funders; and entries in the Institute's Web site guestbook. The work that provides material for this Report extends over the entire year, and the Report is available online.

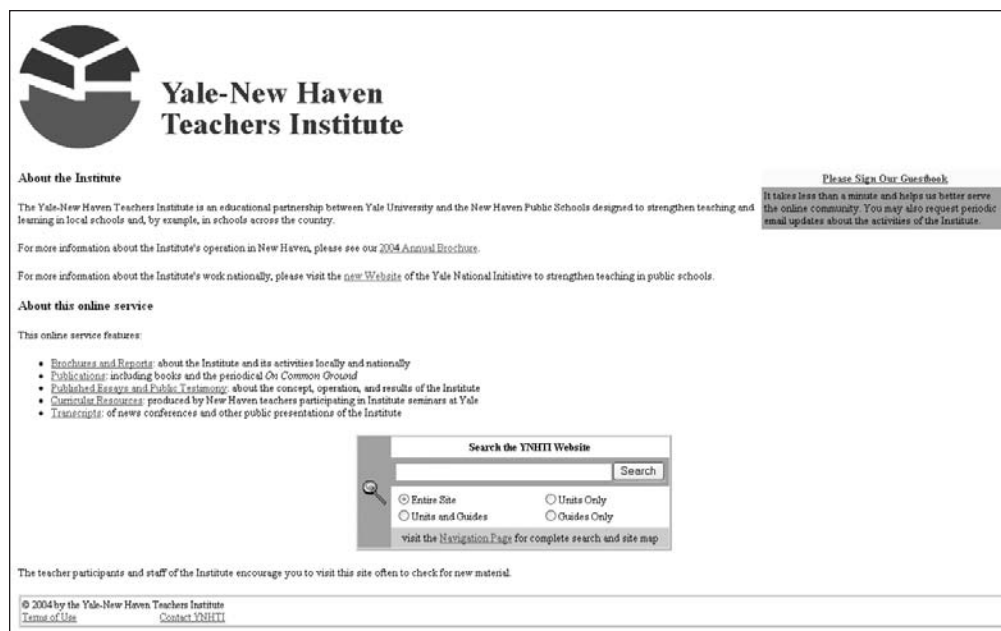
The Institute Web sites

Electronic versions of the Institute's publications — including the volumes of curriculum units and essays and other work — are available at its New Haven and National Web sites. (The addresses are <http://www.yale.edu/ynhti> and <http://teachers.yale.edu>, respectively.) The New Haven Web site played an important role during the National Demonstration Project, as a link in its network of information and a model for the Web sites of other Teachers Institutes, and it remains essential as the Yale National Initiative proceeds. The Yale National Initiative also inaugurated in February 2004 a new Web site, which includes links to the New Haven Web site and to those of the other participating and allied Teachers Institutes. The full texts of almost all the units written between 1978 and 2004, plus an *Index* and *Guide* to these units, are thus available online to teachers in New Haven and elsewhere. Information about the New Haven Institute (its brochures and most recent Annual Reports) is also available, as is the text of its periodical *On Common Ground*, which contains articles regarding school-university partnerships and is intended for a national audience. Many of these publications, including PDF and HTML versions of the periodical, are available on the National Web site. The National site also features news from the League of Teachers Institutes and about the Teachers Institutes bill in Congress.

The Institute has created a "guestbook" on its Web sites, in order to invite comments and suggestions from those who have visited the site. The new Web site for the Yale National Initiative also invites e-mail comments on specific curriculum units and provides forms on which may be entered information concerning teachers and schools. In recent years the New Haven site has been used by more and more people in many parts of this country and abroad —

The Yale National Initiative inaugurated a new Web site, which includes links to the New Haven Web site and to those of the other League Teachers Institutes.

This Web site has been visited by approximately 3.8 million different persons. Approximately 870,000 visited during 2004.



Yale-New Haven Teachers Institute Web site located at www.yale.edu/ynhti.

teachers from both public and private schools (including Fellows from other Teachers Institutes in the National Demonstration Project and the Yale National Initiative), school and university administrators, parents, volunteers, university professors, high school students, graduate students, librarians, military personnel, home schoolers, local policy-makers, and others conducting research or having an interest in education. We estimate that from its inauguration in June 1998 through December 2004, this Web site has been visited by approximately 3.8 million different persons. Of these, approximately 870,000 visited during 2004. The site registered some 6.1 million hits during the year.

In 2004 we continued to hear from educators from many countries. A partial list would include elementary and secondary school teachers, university professors, college students and researchers from Argentina, Australia, Brazil, Canada, Ethiopia, France, Ghana, Greece, India, Indonesia, Iran, Jamaica, Latvia, Nepal, Nigeria, Pakistan, the Philippines, Russia, South Africa, Switzerland, Tanzania, and the United Kingdom. (The partial list for 2003 also included Austria, China, Germany, Israel, Trinidad and Tobago, the United Arab Emirates, and Vietnam.)

The comments that these online visitors submitted are an indication of one way that the Institute is participating in Yale's globalization.

The comments that these online visitors submitted were overwhelmingly favorable, and an indication of one way that the Institute is participating in Yale's globalization. An instructor at Russia's Sakhalin State University called the Institute's Web site "very interesting and useful for my work." A teacher at a Pakistani Army public school and science college said, "This is wonderful in all respects. I like all the matter present on the site." Pursuing a master's degree in English literature, a student at Tribhuvan University in Nepal sought information about the poetry of Langston Hughes. African history was the interest of a teacher at Jamaica's Edna Manley College of the Visual and Performing

Arts; he wrote "Good piece on the Ashanti nation. Good class exercise. Keep it up." A music teacher from Saskatchewan said, "You have very exciting materials and curriculum guides." Writing from Aristotle University in Thessaloniki, Greece, a member of the medical faculty commented, "Very well prepared and organized lessons, useful both for students and teachers. Congratulations!"

From Argentina, a college professor wrote, "I have to lecture on multicultural societies and that is why I reached your site, which I found very interesting," while a Brazilian university colleague said, "That's a very important Web page. I like it very much." A Ghanaian undergraduate came to harvest "a real field of learning." Visitors from South Africa ranged from a writer and developer of school textbooks — who praised the "wonderful resource materials" on the site — to a graduate student at the University of the Western Cape and the director of a language school at the University of Transkei.

Our correspondents from India came from the states of Kerala and Maharashtra as well as New Delhi. A faculty member at the National Institute of Technology in Calicut described the site as "helpful and informative" while a student at the Pune Institute of Engineering and Technology found it "very exciting." A student from Jawaharlal Nehru University — one of Yale's major partners in its globalization initiative — observed: "I just came across this Web site and was really interested to know more about it. It is a wonderful Web site for students who plan to make teaching a profession."

From around the United States came similar statements. Within New Haven itself, a first-year teacher at Hillhouse High School "found the Web site very helpful and interesting" after his mentor teacher — Burt Saxon, a five-time Institute Fellow and Connecticut's Teacher of the Year for 2004-05 — spoke with him about the program. A teacher in Massachusetts commented, "We service children coming into the Newton schools from Boston through the METCO program and neighborhood children of color. We have been writing curriculum for a special program. Your Web site has been extremely helpful." Another, from St. Augustine High School in Florida, said, "I found your curriculum study on Willa Cather's *My Antonia* to be extremely varied and helpful with my 10th grade honor students. I especially appreciated the essay questions and the notes. Thank you!" A teacher certified in Pennsylvania wrote, "I am taking the praxis for New Jersey certification in two weeks. Your site has been so very helpful." A teacher at the New England Institute of Technology in Warwick, Rhode Island called the site, "A gold mine of teaching resources." An educational consultant from Daly City, California had a similar reaction: "Thank you for providing an outstanding resource for teachers." An art educator of alternative high school students in Sanborn, New York wrote, "I was lucky enough to find the Institute Web site and I am excited by the titles listed in the curriculum resources section. I know I will be inspired by the site and thank you in advance for sharing such a quality resource." A member of the faculty at the City University of New York said simply, "Great!"

"I've used several lesson plans from your site and they were wonderful. You inspired (and, in some ways, saved) me."

—Teacher from San Francisco

A veteran teacher in Corona, California wrote, "Excellent work. You are providing an invaluable service to the educational community," while a new teacher in San Francisco commented, "I've used several lesson plans from your site and they were wonderful. You inspired (and, in some ways, saved) me in my first year as a intern teacher." A pre-service teacher at Portland State University in Oregon wrote, "The lesson and unit plans are great. I am using them as idea-generators in planning some of my unit and lesson plans. Thank you!" A Chicago high school teacher said, "Fantastic resources. Thoughtful, well rounded curriculum plans easily adaptable across grade levels." Also at the high school level, a teacher in Juncos, Puerto Rico said, "Your work is great. It has inspired me to keep up the struggle to teach under such harsh circumstances. God bless you all." A Columbus, Ohio teacher remarked, "I have had the pleasure of indirectly finding your resources and have loved them each time. What a great partnership you have and an impressive program. I enjoy your work (online) immensely!" And two Virginia teachers — from Virginia Beach and Newport News, respectively — had the following comments: "I found the Web site to be very informative and helpful. I wish I had found this site earlier," and "Your Web site delivered exactly what I was looking for in curriculum units."

As the previous passages suggest, the comments about the Institute's Web site addressed many disciplines of study. From Louisiana's Northwestern State University, a faculty member responded, "This is a really great site. I appreciate the resources that your site offers English teachers everywhere. You have really helped with my transformation from taking literature classes to teaching literature classes." A Hastings, Michigan teacher said, "I just began teaching debate and drama to seventh and eighth graders. In developing my curriculum, I have found your Web site incredibly helpful and extensive. We do not have anything of this nature in Michigan and I am glad to see something of this nature available to people outside your area." Teaching in Chesterfield, Missouri, one correspondent wrote, "As I was searching for some ideas for middle-school writing projects, I found your site. The article on writing autobiographies was very helpful. Thank you!" A teacher at the Batesburg-Leesville Middle School in South Carolina said, "The units that I have looked at have been extremely useful. I teach Industrial Technology and Applied Physics to middle school students. Your participating teachers at this site have written some very useful material for me. Glad I came across it and will share this site with other technology teachers through our newsletter." Teaching Spanish in South Carolina, one correspondent spoke of a unit on 'Cultural Aspects of Spanish in America' and called it "such a wonderful site, full of information, so useful to us teachers." A teacher in Ripley, Tennessee exclaimed, "I'm looking forward to using 'Poetry for the Elementary Classroom.' I've been hunting down the poems all weekend and set my librarian to work on Monday. If the rest of site contains material like this, I'll be surfing it all night!" From a tutor in Huntington Beach, California: "I found the lesson plans for the Vietnam War excellent. I look forward to viewing other lesson plans and information the site offers." From Jeffersonville, Indiana: "This is an excellent resource. I teach language arts and social studies to seventh

graders." An independent school teacher in Raleigh, North Carolina said, "I'm teaching high school lit for the first time, having taught only college composition. Your section on *Oedipus Rex* is going to be a huge help to me. Thanks!" A public school teacher from Brunswick, Georgia wrote, "I have used your site many times for unit ideas. I enjoy the thematic units that combine all facets of English/language arts instruction and promote critical thinking and application." And a Falcon, Colorado teacher added, "Outstanding! I've been given a position in 6th grade science and math, with a book of objectives/standards but no supplies or printed teacher support. You are setting me up for a fantastic year in a new program!"

A number of community college students and faculty expressed their appreciation. From Tacoma Community College: "I am pleased to find that these upper-level institutions are working towards unifying the field of public and private educational resources. Thank you. Keep up the good work!" From Allen County Community College in Kansas came these words: "It's a great site; I found a lot of the information I was looking for, for my research paper. Thank you very much." And a teacher at Kingwood College in Texas wrote, "I appreciate your online assistance with teaching literature!"

From across the state of Texas alone, many more laudatory messages arrived. A public school teacher in San Antonio (and a graduate of Trinity University) said of the Web site, "I have found that it is an amazing resource. I look forward to seeing more and hearing more about it." Also from San Antonio came these reactions: "This is great work. I teach at a private school that is the laboratory school for the Education department at a Catholic University. I have passed this Web site along to the university faculty in hopes our partnership might become something like this"; and (from a public middle-school teacher) "I have been using ideas from your excellent curriculum units for six years. They are wonderful! Thank you!!!" A "librarian and home-schooling mom" in Little Elm wrote, "Great! I am doing a program on the *Red Badge of Courage* at my library and needed ideas for activities. Your site was a big help!" Similarly, the parent of a student at Austin's McNeil High School commented, "It was very informative. My son had to do a research project on the impact of Hoover's administrative policies on America's morale during the early years of the Great Depression." A teacher at Austin's Khabele School wrote, "These lesson plans are great. Just reading over some of the resources on this site has sent my mind reeling with ideas." A teacher in Corpus Christi said, "Great site. I look forward to using more of your materials." An Irving teacher wrote, "I've looked at three lesson plan sets — Brown v. Board of Topeka, Constitution and Censorship, and creation/genetics. All three are outstanding for what I need." And an education major at the University of Houston responded, "I love the materials available here. I am inspired!"

The "guestbook" also contains some intriguing surprises. A counselor in Zuni, New Mexico consulted the Web site in the cause of "developing 'learning centers' for high at-risk adolescents grades 7-12. I am particularly interested in

"I have used your site many times for unit ideas. I enjoy the thematic units that combine all facets of English/language arts instruction and promote critical thinking and application."

—Teacher from Georgia

"These lesson plans are great. Just reading over some of the resources on this site has sent my mind reeling with ideas."

—Teacher from Austin

utilizing music, social studies, video, and literature." A teacher/counselor at a parochial school in Balgo, Washington said, "The choices are wide and the learning offered in the curriculum units is impressive. The detail, the depth of ideas and the variety." The chair of the Racial Reconciliation Institute of the Union of Black Episcopalians wrote to obtain permission to use unit on the Civil Rights Act of 1964, for an event that included the leader of the Diocese of South Africa as well as the mayor of Cincinnati. From elsewhere in Ohio, a Yale graduate now working as a public school teacher in Columbus remarked, "I think the site is fabulous. As a former Yale student I think it is critical that Yale continue to reach out to the greater community, offering resources and listening to the many wise and creative voices beyond the walls of the institution itself. Bravo!" And a self-described "ex-librarian and current volunteer tutor" in University Heights said discovering the Web site "was like winning the lottery."

Clearly the curriculum units prepared by Fellows of the Yale-New Haven Teachers Institute continue to demonstrate their usefulness in many different ways for teachers who are engaged within a wide range of subjects and who have received many kinds of preparation.

Local Advisory Groups

Steering Committee

A Steering Committee, composed of school teachers who have played leading roles in the Institute at various times since its inception, has responsibility for long-range planning and the implementation of pilot and other new activities of the Institute. Members of the Steering Committee are selected by the Institute Director. A Steering Committee member must be — and must intend to continue as — a teacher in one of New Haven's public schools. By agreeing to serve as a Steering Committee member, a teacher accepts the following responsibilities. Each member:

- Exerts leadership and participates actively in one or more of the following areas: establishment and development of Institute Centers for Professional and Curriculum Development in specific schools; dissemination of system-wide curricula drawing on Institute curriculum units, in print and electronic form; support for the teachers serving as school Representatives and in other leadership roles; evaluation of the Institute's pilot effort to better involve and support new teachers; and facilitation of collegial relations with other teachers and school administrators throughout the district.
- Attends and comes prepared to meetings twice monthly and takes professional days when needed to carry out these responsibilities.



Michael Marsland

A Steering Committee has responsibility for long-range planning and the implementation of pilot and other new activities of the Institute.

Steering Committee meeting. (Left to right: Steering Committee members Carolyn N. Kinder and David DeNaples; Associate Director Josiah H. Brown; and Steering Committee members Jean E. Sutherland and Pedro Mendia-Landa.)

- Participates as an Institute Fellow in the spring and summer following selection as a Steering Committee member.

The members of the Steering Committee during 2004 were David DeNaples of Wilbur Cross High School through July, Sandra Friday of Wilbur Cross Annex High School beginning in September, Carolyn N. Kinder of Sheridan Middle School, Pedro Mendia-Landa of Columbus Family Academy, and Jean E. Sutherland of Beecher Elementary School. The Steering Committee exercises teacher leadership in each sphere of Teachers Institute work. The Committee focused during the year on the Institute Centers for Curriculum and Professional Development, the implementation of the seminars for 2004 as well as planning for 2005, the involvement of new teachers and evaluation of their Institute experience, and the cultivation of teacher leadership within the Institute.

As described earlier in this report, with guidance from the Steering Committee and a special survey the Committee developed, in 2004 the Institute concluded a three-year pilot effort to identify and inform new teachers about the program — a pilot whose success led the Institute to continue such action on a permanent basis. Working with the Representatives, the Steering Committee considered how the Institute can also assist teachers at various other stages of their professional development in meeting state and district requirements. The Committee encouraged the emergence of new Center teams at a number of schools and worked closely with the Representatives who were serving in that capacity for the first time, circulating a needs-assessment late in the fall to gauge progress since the orientation that Committee members had led early in September.

With encouragement from the Steering Committee, Associate Director Josiah H. Brown continued to visit elementary, middle and high schools across the city and — often joined by Institute Fellows — made presentations at the invitation of school principals. Along with Fellows, he also spoke on the Institute's behalf at the district's Open House for prospective teachers on January 8 and at its Teacher Visitation Day on April 29. Those events were opportunities to demonstrate the Institute's potential for helping to attract, as well as to develop and retain, qualified teachers in the district. On other occasions, Brown attended an orientation session for the district's new teachers at which he and several Fellows introduced them to the Institute, and spoke with faculty and teachers-in-training at universities such as Southern Connecticut State. The aim was to ensure that both new and prospective New Haven teachers were well aware of the opportunities for curricular and professional development that the Institute affords — opportunities not available to teachers in other Connecticut districts. On some of these occasions, Steering Committee members joined Brown in joint presentations.

The aim was to ensure that both new and prospective New Haven teachers were well aware of the opportunities for curricular and professional development that the Institute affords.

University Advisory Council

Yale faculty members advise and assist the Institute through the University Advisory Council and its Executive Committee, both appointed by the Yale President. (For members of these bodies, see Appendix.) The Advisory Council guides the general direction of the program and acts as a course-of-study committee so that the Institute can certify Fellows' work to institutions where they may be pursuing advanced degrees. The Council also advises the Yale President on the Institute and, more generally, on matters concerning the University's involvement with the schools locally and with public elementary and secondary education nationally.

The University Advisory Council meets once each year, the Executive Committee at least once each semester. The co-chairs of the Council communicate frequently with the Director between meetings. Members of the Executive Committee and the Steering Committee meet jointly from time to time to share information about their respective activities and to explore appropriate ways of working together.

During 2004 the Executive Committee met in February, May, and November. At the February meeting the Executive Committee formally approved the Institute's seminars for 2004. It also discussed the status of our national plans and the agenda for the Council meeting that would be held on May 4. The May 18 Executive Committee meeting reviewed results of the University Advisory Council meeting held two weeks before, as well as the procedure for certification of Fellows' course of study, the Yale National



Michael Marsland

The Council advises the Yale President on the Institute and, more generally, on matters concerning the University's involvement with the schools locally and with public elementary and secondary education nationally.

University Advisory Council meeting, May 2004. (Clockwise from left: Margot Fassler, Kurt W. Zilm, Donald M. Engelman, Director James R. Vivian, Mary E. Miller, Thomas R. Whitaker, Jon H. Butler, Dudley Andrew, Traugott Lawler, Paul H. Fry, James A. Bundy, Bruce D. Alexander, Jonathan D. Spence, John P. Wargo, Associate Director Josiah H. Brown, Sharon M. Oster, Murray J. Biggs, Richard C. Levin, and Roberto González Echevarría.)

Initiative to strengthen teaching in public schools, and fundraising. The November meeting dealt with the New Haven program conducted in 2004, that program's needs for funding in the sciences for future years, the procedure for certification of course of study, promotion of the Yale National Initiative through various media, and plans for Co-Chair Mary Miller and James Vivian to hold an informational meeting with the new Yale Provost, Andrew Hamilton.

On May 4, the full University Advisory Council held its eleventh annual meeting with President Levin. The meeting was called to order by Co-Chair Roberto González Echevarría, who stated its primary purposes: (1) to discuss the potential advantages and disadvantages of Federal legislation for advancing the Institute's work nationally; and (2) to consider the role of the Institute in the globalization of the University.

James R. Vivian then gave a brief report summarizing the Institute's 26th year of operation in New Haven and its final preparations for the Yale National Initiative. He mentioned the five seminars led in 2003 by Dudley Andrew, John Demos, Paul Fry, Daniel Prober, and John Wargo and also the five seminars then underway in 2004. Vivian noted the Institute's continuing emphasis on recruiting individuals who are in their first year of teaching in New Haven, and on exploring how it can provide both collegial support and practical assistance as they enter teaching. It hopes in this way to reinforce the role it has historically played in retaining individuals in teaching in New Haven.

Vivian stated that the Institute has largely completed the preparation phase for the National Initiative. He reviewed the past four years of activity



Michael Marsland

University Advisory Council meeting, May 2004. (Left to right: Dudley Andrew, Jon H. Butler, Paul H. Fry, Traugott Lawler, and James A. Bundy.)

undertaken with the Council's assistance. Among the chief accomplishments in the past year, he said, is the development of a final version of the Understandings and Necessary Procedures for the establishment of new Teachers Institutes, based in part on advice received from the directors of the Pittsburgh Teachers Institute and the Houston Teachers Institute. He also described three evaluations of the National Demonstration Project now completed. The Pittsburgh Teachers Institute commissioned an evaluation carried out by Cornerstone Evaluation Associates and the Director of Undergraduate Research at Carnegie Mellon University. The Houston Teachers Institute commissioned an evaluation carried out by two professors of the Department of Sociology at the University of Houston. The Institute itself commissioned an evaluation of the entire National Demonstration Project, carried out by Rogers Smith, now Professor and Chair of Political Science at the University of Pennsylvania.

Vivian provided the Council with copies of Roger Smith's final report entitled "To Motivate My Students," which the Institute has begun to disseminate. Smith concludes that "The Institute approach significantly strengthens teachers in all five major dimensions of teacher quality." Successful Teachers Institutes have demanding requirements, he writes, "but the National Demonstration Project has shown clearly that they can be met and that everywhere they are met, the quality of teaching in America's schools can be significantly improved."

"The Institute approach significantly strengthens teachers in all five major dimensions of teacher quality."

—Rogers M. Smith

A new booklet on the National Initiative, Vivian said, will contain the Understandings and Necessary Procedures for establishing an Institute, together with a summary of the findings of the three evaluations. The booklet, published later in 2004, contains information about the League of Teachers Institutes formed by the National Initiative, as well as instructions and forms for developing new Teachers Institutes.

Vivian also noted that, following through on the Council's encouragement for the Institute to expand its use of technology, it has developed a new Web site for the National Initiative. This Web site already contains the material that will be published in the new booklet, the three evaluations that have been carried out, the Institute's periodical *On Common Ground*, and other publications. Educators and others may search the curriculum units teachers have written at all the Institutes and may submit, for possible posting, comments on the units they have used. The Web site also contains frequently updated feature stories on the National Initiative and news items from each of the League's Institutes. The entire contents of the Web site, including two videotape programs and two books on the Institute, have also been placed on a new interactive CD-ROM that will aid the dissemination of information to schools and colleges and universities around the country. The many books, videos, and essays that were shipped in 1997 in large boxes to cities exploring the establishment of an Institute are now contained on a CD-ROM the size of a business card, which Vivian distributed to the Council.

Vivian then described the continued growth of the Yale-New Haven Teachers Institute Web site, which remains one of the most popular of the some 1,400 sites on the main University server. During 2003 its popularity grew: more than 800,000 different persons visited that Web site, and it registered about 5.5 million hits. The guestbook shows that it was used by many educators from the United States and from other countries. (See the section of this report on the Web sites for further information on the 6.1 million hits registered by 870,000 unique visitors in 2004.) In this way and others, the Institute already is participating in the globalization of the University — the subject to which the discussion then turned.

Vivian noted that numerous Institute seminars and curriculum units teachers have written address topics about international affairs as well as the history, culture, literature, art, geography, and politics of various countries and areas of the world. In addition, he and others have met with educators and policy makers from other countries to explain the Institute approach and explore its potential application in their countries. As early as 1987, Vivian met with her Majesty's School Inspectors of the United Kingdom who were visiting the United States under the auspices of the U.S. Information Agency. In 1991, he gave a day-long seminar at the Carnegie Foundation for the Advancement of Teaching to Madame Hao-Keming, Director-General of the National Center for Education Development, and the State Education Commissioners of the People's Republic of China. More recently the Institute has received visits from representatives of the Danish Ministry of Education and from Okayama University in Japan. In recent years it has disseminated information also to educators in Greece, Brazil, Finland, Israel, and Venezuela.

National Seminars will resume in 2005. Teachers participating in these seminars will be nominated by existing Teachers Institutes, school districts developing Teachers Institutes, and other districts wishing to explore the Institute approach.

With regard to the Yale National Initiative, Vivian stated that during the past year he has found foundations and companies in many cities across the country receptive to helping to establish Teachers Institutes for their home communities. Meeting with local and regional funders has proved to be a promising approach for encouraging the establishment of new Teachers Institutes. An important way of cultivating interest in the Institute approach in such cities, he said, will be a resumption of National Seminars held at Yale that were, for teachers, one of the most popular features of the National Demonstration Project. The National Seminars will resume in 2005. Teachers participating in these seminars will be nominated by existing Teachers Institutes, school districts developing Teachers Institutes, and other districts wishing to explore the bearing of the Institute approach on their professional development practices.

Further disseminating the Institute approach seems timely. A GAO Report on Teacher Quality submitted to Congress in July 2003 concluded that many states and local school districts view inadequacies in teacher professional development (particularly a lack of focus on content and insufficient rigor) as a principal barrier to achieving the goals of the No Child Left Behind Act that there be a highly qualified teacher in all core subject classrooms. States indicated that they will spend about two-thirds of their Federal Title II funds

on professional development, and this represents an important source of support for new Teachers Institutes. Other Federal funds are already available to assist with the establishment and operation of Institutes, including the Teaching American History Program in the Department of Education and NSF research grants that contain outreach requirements.

Vivian also recounted his work during the past year on legislation for a grants program that would establish Teachers Institutes in states throughout the nation. Known as the Teacher Professional Development Institutes Act, this legislation would be included in Title II of the Reauthorization of the Higher Education Act. It, too, is timely, for it complements the teacher quality provisions of the No Child Left Behind Act and would provide Federal funding for colleges and universities to enter partnerships to strengthen teaching of subjects in the sciences and the humanities in the nation's schools. The Institutes to be established would follow the approach that has been successfully implemented in other cities during the National Demonstration Project. The \$30 million the legislation would authorize to be expended over five years would provide for the creation of as many as eight Teachers Institutes each year, so that by the fifth year there would be an exemplary Institute operating in as many as 40 states. These Institutes would enable state and local education policy makers throughout the United States to examine the usefulness of our innovative and tested approach for their policies and practices for teacher professional development.

The Teacher Professional Development Institutes Act would provide Federal funding for Institutes to be established which would follow the approach that has been successfully implemented in other cities during the National Demonstration Project.

Vivian concluded by saying that the New Haven program continues as a strong example of the Institute approach which, as the new studies and evaluations show, has been successfully implemented in other cities. We have developed additional means of disseminating that approach and its tangible curricular products throughout the United States and globally. And we have identified existing and potential sources of support for establishing new Teachers Institutes around the country.

Co-Chair Mary Miller then opened discussion on the first of the two questions put before the Council at this meeting by asking: What appear to be the potential advantages and disadvantages of Federal legislation for advancing the Institute's work nationally? Questions posed about the Federal legislation included the following:

"What does it mean for the Institute to be a model?" Mary Miller answered that all funding would be to institutions in the several states. We would hope, however, to run National Seminars with Pittsburgh and Houston. (Indeed four National Seminars in New Haven are planned for 2005.) James Vivian added that the bill would authorize the Department of Education to contract with existing Teachers Institutes to provide technical assistance.

"Isn't there some risk of diluting the product? What monitoring or control would be possible?" President Levin answered that we have a history of successful monitoring and control over the past eight years. James Vivian added

that the League of Teachers Institutes would also provide some inducement to remain true to the model, for it would require that a "full member" of the League would accept the Understandings and Necessary Procedures.

"How could the National Seminars be genuinely exemplary? Wouldn't selected National Fellows be better prepared and more committed to a shorter seminar than the New Haven Fellows are to a longer seminar?" Several people who had led seminars granted the differences but pointed out that the National Fellows have been, and would surely be in the future, vigorous apostles of the model in other cities.

Mary Miller then turned to the second question: What should be the role of the Institute internationally in the globalization of the University? Cautionary and encouraging statements included the following:

We should be aware that there are two major differences between American schools and those elsewhere: technical training is better in certain other countries, and most primary and secondary education is very narrowly focused. There might therefore be less opportunity, and less interest, in an Institute program — at least for the average teacher. Yet, it was noted, there may be some areas — China, South Africa, and Eastern Europe, for example — that are rethinking what education should consist of. An Institute program might be relevant there.

When it was questioned whether the emphasis of the Teachers Institute might be too local for any substantial interest abroad, it was asserted that studies



Michael Mussland

University Advisory Council meeting, May 2004. (Left to right: Sharon M. Oster, Murray J. Biggs, Daniel E. Prober, Richard C. Levin, Roberto González Echevarría, Robert J. Wyman, Gary L. Haller, and Werner P. Wolf.)

in American culture are very attractive in foreign cultures — and that many seminar topics were in some respects "global." It was suggested that a useful project might be to bring from abroad a Fellow to a local seminar. Perhaps each seminar could have one global participant. Several members of the Council found this an attractive suggestion, and proposed that it might be broadened to include Fellows from other cities in this nation. It was also urged, however, that we think carefully through the financial burden that such a project would entail.

Another suggestion was that we might develop seminars that were in principle transferable to other parts of the world — a series of seminars that would be explicitly or implicitly global in focus, e.g., environmental studies.

Discussion returned to the question of the narrow focus of primary and secondary education in other countries: What would a Fellow from abroad actually be able to do upon returning home? Several answers were proposed: We should emphasize the "process" not just the "product" — and the process might encourage changes in a foreign educational system. This led to the suggestion that the Institute might better proselytize educational bureaucracies rather than the line teachers. One might bring university people — from China, for example — to talk about the relation between universities and schools. President Levin said that this could be seen as an aspect of what was already a topic in the discussion of globalization at Yale: the university and the community. Several members thought that it would be useful to explore the possibility of establishing connections with educational leaders abroad.

The Council concluded its discussion with a reminder that the work in New Haven is of primary importance — but that its success will not be diminished if we continue to look elsewhere for expanded opportunities. The local and the national work have proven to be mutually reinforcing, and further international explorations could be similarly fruitful. The national work has provided opportunities for New Haven teachers and Yale faculty members to learn about the educational landscape in other communities. It has made us better at explaining the Institute approach, and more certain of its value. And the National Initiative continues to draw attention and support to the Yale-New Haven program that it would not otherwise receive. This has only strengthened our resolve to make our work in New Haven the best possible example of the Institute approach.

Later in May, at the recommendation of the Executive Committee, President Levin appointed Sabatino Sofia to join Mary Miller and Roberto González Echevarría as a Co-Chair of the Council for a five-year term through 2009. President Levin also invited Mary Miller to continue as Co-Chair for an extended period through her current term on the Council in 2006.

The local and the national work have proven to be mutually reinforcing, and further international explorations could be similarly fruitful.

FINANCIAL PLANS

For the local program, the Yale-New Haven Teachers Institute is currently seeking funds that might be used for seminars in either the humanities or the sciences. Its major long-term need is for an endowment that would provide continuing support for seminars in the sciences. The existing endowment for the Teachers Institute is limited to support for seminars in the humanities, and the teachers' expressed need for seminars in the sciences remains strong. In December the William Randolph Hearst Foundations made an endowment grant of \$150,000 for the Institute's work in the sciences — an important step toward a permanent science endowment to complement the humanities endowment.

The Teachers Institute has developed a plan for a fourteen-year continuing initiative.

On the national level, the Teachers Institute has developed a plan for a fourteen-year continuing initiative, to be known as the Yale National Initiative, that will establish as many as 45 additional Teachers Institutes throughout the nation. The Yale National Initiative has included a two-year Preparation Phase, which began in 2002 and will be followed by a twelve-year Implementation Phase. Support for the Preparation Phase was made possible in part by a grant from the Jessie Ball duPont Fund.

During the Implementation Phase, funds will be needed to:

- provide continuing support for a national League of Teachers Institutes, with appropriate staff and technical support;
- provide renewable Implementation Grants for the participating Teachers Institutes already established, in order to assure their viability, their scaling-up to serve their own urban sites, and their contribution to the process of establishing new Teachers Institutes;
- enable the Yale-New Haven Teachers Institute and, to some extent, the other participating Institutes, to make initial contacts, carry out visits to interested sites, offer National Seminars, maintain an annual Intensive Session in New Haven, and organize Annual Conferences;
- sustain the publication of *On Common Ground*, which will serve as a means of disseminating information about the progress and results of the National Initiative; and
- provide nine-to-twelve-month Planning Grants and three-year renewable Implementation Grants to the new Teachers Institutes being established.

Funds will also be needed to provide research and technological assistance for the national League of Teachers Institutes.

The funding described above might best be provided by a partnership between Yale University and one or more major foundations, which would work with us in accomplishing the plan. That funding might be supplemented

as necessary by other major grants or lesser grants. The grants might be administered by the partnership, by individual foundations, or by the office of the Director of the Yale National Initiative. The projected cost for the entire Yale National Initiative is 63.8 million dollars. A detailed break-down of that figure is included in the document prepared by the Institute: "Strengthening Teaching in America's Schools: A Proposal to Replicate Nationally the Successes of the Yale-New Haven Teachers Institute."

In June United States Senators Joseph Lieberman and Christopher Dodd, and Congresswoman Rosa DeLauro of New Haven, introduced the Teacher Professional Development Institutes Act, which complements the No Child Left Behind Act's provisions for teacher quality by enabling the creation over five years of as many as 40 additional Teachers Institutes throughout the country. The legislation is modeled on the Yale-New Haven Teachers Institute, and its enactment would provide a tremendous boost to the National Initiative. The Senators and the Congresswoman are seeking bipartisan co-sponsors and supporters of this legislation from all regions, especially from those states and cities that already have, or are exploring the establishment of, Teachers Institutes.

*United States
Senators Joseph
Lieberman and
Christopher Dodd,
and Congresswoman
Rosa DeLauro of
New Haven,
introduced the
Teacher Professional
Development
Institutes Act.*

CONCLUSION

In 2004 the Yale-New Haven Teachers Institute continued its New Haven program undiminished while announcing the Yale National Initiative to strengthen teaching in public schools, which is based on the efficacy of the New Haven program and the success of its National Demonstration Project.

Operating in New Haven for the 27th consecutive year, the Teachers Institute conducted a program of five seminars for local Fellows, nearly half of whom participated for the first time. The Institute continued both a pilot effort to involve and support teachers new to New Haven and its Centers for Professional and Curriculum Development in certain schools. The Institute expanded its online capacity through a second Web site that contains additional curricular resources as well as information about the New Haven work and the National Initiative. In these and other ways, the Institute supported the school district's efforts to prepare and retain well-qualified teachers, and to develop resources to help implement school plans that address district goals.

The Institute looks ahead to maintaining its local vigor and extending its national influence as a tested model of high-quality professional development for teachers that has been shown to improve student achievement. The Institute is seeking funds to continue the Yale National Initiative, which aspires to establish as many as 45 new Teachers Institutes in states across the nation.

APPENDIX

Committees, Councils, and Boards of the Institute

National Advisory Committee

Gordon M. Ambach
Leon Botstein
Richard H. Ekman
Norman C. Francis
I. Michael Heyman
Bonnie B. Himmelman
Owen M. Lopez
Ilene Mack
Robert Schwartz
Theodore R. Sizer
David L. Warren
Glegg L. Watson

University Advisory Council

Honorary Chairman

Howard R. Lamar

Co-Chairmen

Roberto González Echevarría
Mary E. Miller
Sabatino Sofia

Executive Committee

Gary L. Haller
Jules D. Prown
Cynthia E. Russett
John P. Wargo
Thomas R. Whitaker

Members

Bruce D. Alexander
Dudley Andrew
Murray J. Biggs
Kent C. Bloomer
Richard H. Brodhead*
James A. Bundy
Robert A. Burt
Jon H. Butler
Edward S. Cooke, Jr.
Michael J. Donoghue
Donald M. Engelman
Margot Fassler
Paul H. Fry
Glenda E. Gilmore
Paul Gilroy
Langdon L. Hammer
Jeffrey D. Kenney
Traugott Lawler
Richard C. Levin
Linda K. Lorimer
J. Michael McBride
Michael H. Merson
Amy Meyers
Alexander Nemerov
Leon B. Plantinga
Daniel E. Prober
Alice Prochaska
Jock M. Reynolds
John Rogers
Bruce M. Russett
Peter Salovey
Alanna Schepartz
Margretta R. Seashore
Ian Shapiro
Jonathan D. Spence
James G. Speth
Deborah G. Thomas

Gerald E. Thomas
C. Megan Urry
Werner P. Wolf
Robert J. Wyman
Karen Wynn
Michael E. Zeller
Kurt W. Zilm

** until July 2004*

Steering Committee

David DeNaples
Sandra K. Friday
Carolyn N. Kinder
Pedro Mendia-Landa
Jean E. Sutherland

School Representatives and Contacts

Joanna M. Ali
Trudy A. Anderson
Kathleen L. Ayr
Abie L. Benítez
Kristen A. Borsari
Justin Boucher
Stephen P. Broker
Raymond W. Brooks
Joyce Bryant
John B. Buell
Elsa M. Calderón
Kristin Carolla
Shannon L. Cohen
Giovanna M. Cucciniello
Karen de Fur
David DeNaples
Mary Donahue
Robert P. Echter
Willie J. Elder
Christine A. Elmore
Sandra K. Friday
Judith S. Goodrich
Phyllis S. Grenet
Sean T. Griffin
Gail G. Hall
Peter N. Herndon
Christine House
David Howe
Kevin P. Inge
Deborah A. James
Mary E. Jones
Wendy J. Kimball
Carolyn N. Kinder
Waltrina D. Kirkland-Mullins
Evelyn F. Lawhorn
Jeanne Z. Lawrence
Joseph H. Lewis
Mara Malafronte
Roberta A. Mazzucco
Pedro Mendia-Landa
Susan Norwood
Genoveva T. Palmieri
Angelo J. Pompano
Joanne R. Pompano
Malini Prabakar
David N. Reynolds
Gwendolyn Robinson
Burton R. Saxon

Elizabeth Scheffler
Dina K. Secchiaroli
Virginia Seely
Kristi V. Shanahan
Sharron Solomon-McCarthy
Saundra P. Stephenson
Jean E. Sutherland
Jason Todd
Yolanda U. Trapp
Michael D. Vollero
Kathleen Ware
Mnikesa F. Whitaker
Cynthia E. Wilson

Seminar Coordinators

David DeNaples
Carolyn N. Kinder
Ralph E. Russo
Sharron Solomon-McCarthy
Jean E. Sutherland

Team of New Haven Colleagues in the Yale National Initiative

Yale Faculty Members

Mary E. Miller
Jules D. Prown
Cynthia E. Russett
Sabatino Sofia
John P. Wargo
Thomas R. Whitaker

New Haven Public School Teachers and Administrators

Stephen P. Broker
Sandra K. Friday
Carolyn N. Kinder
Joseph A. Montagna
Ralph E. Russo
Jean E. Sutherland

National Steering Committee

Daniel Addis
Stephen P. Broker
Carolyn N. Kinder
Mary Ann Natunewicz
Carol M. Petett
Donald Roberts

National University Advisory Council

Michael Field
Karen S. Goldman
Richard Holman
Mary E. Miller
Sabatino Sofia
William Widger

On Common Ground Editorial Board

Manuel N. Gómez
Jules D. Prown
Jay L. Robinson
Charles S. Serns
Rogers M. Smith
Thomas R. Whitaker

Fellows and Seminar Leaders of the Yale-New Haven Teachers Institute, 1978-2004

Fellows

*23_Joyce Bryant	Nancy Kasowitz	Diane E. Platt	David DeNaples
21_Carolyn N. Kinder	Gwendolyn Robinson	Patricia S. Gaffney-Ansel	Mara A. Dunleavy
16_Jean E. Sutherland	Mary E. Jones	Phyllis A. Taylor	Miriam G. Gonzalez
15_Maureen C. Howard	Norine A. Polio	Cynthia McDaniels	Pamela Monk-Kelley
14_Peter N. Herndon	Carolyn S. Williams	Antonia M. Coughlin	Sondra A. White
13_Geraldine M. Martin	Kathleen Ware	Sloan E. Williams III	William J. Derry
Grayce H. Storey	5_Francis J. Degnan	Lois R. Van Wagner	Anthony B. Wight
12_Benjamin A. Gorman	Michael A. Vuksta	Gail A. Staggers	Edward D. Cohen
Roberta A. Mazzucco	Alan K. Frishman	Patrick A. Velardi	Nancy N. Esposito
Raymond W. Brooks	Karen S. Wolff	Sheryl A. DeCaprio-Hershonik	Beverly A. White
Harriet J. Bauman	Paul E. Turtola	Ida L. Hickerson	Richard A. Silocka
G. Casey Cassidy	Elsa M. Calderón	Dina K. Secchiaroli	John A. Severi
Henry A. Rhodes	Iole A. Apicella	Lynn S. Pensky	Sean Griffin
11_Anthony F. Franco	Kathleen B. London	Belinda M. Carberry	Myrella Lara
10_William P. Coden	Deborah E. Hare	Gary Highsmith	Joseph R. Cummins
Jane K. Marshall	Delci C. Lev	Anna K. Bartow	Ralph E. Russo
Cynthia H. Roberts	Angelo Joseph Pompano	Abie L. Benítez	John B. Buell
Diana D. Doyle	Pamela M. Fowler	Christine Y. House	Carol L. Cook
Beverly B. Stern	Stephen Beasley-Murray	3_Zelda L. Kravitz	Tarah S. Cherry
9_SChristine A. Elmore	June M. Gold	Frank J. Gallucci	Thelma E. Stepan
Carolyn C. Smith	Lisa S. Alter	Fred M. Kerson	Sophonria L. Gallop
Joanne R. Pompano	Richard R. MacMahon	Margaret D. Andrews	Judith D. Dixon
Joseph H. Lewis	Elizabeth T. Tortora	Frances J. Sandahl	2_Penny K. Zhitomi
Stephen P. Broker	Valerie A. Polino	Franklin C. Cacciutto	Caroline B. Jackson
Francine C. Coss	Henry J. Brajkovic	Robert A. Gibson	Lula M. White
8_Joan A. Rapczynski	Pamela M. Price	Camilla L. Greene	Carolyn F. Stephenson
Luis A. Recalde	Susan S. Small	Mary Stewart	Maureen F. Onofrio
James F. Langan	Burton R. Saxon	Soraya R. Potter	Robert W. Mellette
Joseph A. Montagna	Michael Conte, Jr.	Chris Angermann	William F. Natale
Richard N. Canaleri	John P. Crotty	Kathleen R. O'Neil	Mary M.U. McGuire
Lauretta J. Fox	Elisabet O. Orville	Deborah L. Peck	Gregory M. Huff
Mary E. Brayton	4_Jacqueline E. Porter-Clinton	Frances E. Pierce	Carol A. Petuch
Patricia K. Flynn	Lee B. Hotchkiss-Durward	Deborah T. Barnes	Sheila H. Troppe
Pedro Mendia-Landa	Anthony P. Solli	Gail G. Hall	Wanda A. Velez
7_Sandra K. Friday	Mary A. Howley	Lystra M. Richardson	Maria Pennachio
Lorna S. Dils	Cheryl E. Merritt	Maryanne K. Basti	Cleo M. Coppa
Ruth M. Wilson	Gerene L. Freeman	Lewis L. Spence	Florence Zywockinski
Val-Jean Belton	Marie P. Casey	Mia P. Edmonds-Duff	Maizie P. Butterfield
Yolanda U. Trapp	Maureen E. Taylor-French	Ruth R. Schwartz	Lilly Ann M. Santorelli
Bethania H. Urena	Stephen H. Kass	Sequella H. Coleman	Margaret B. Clancy
Linda M. Powell	Joyce A. Patton	Clarence Roberts, Jr.	Iris R. Davis
Carol L. Altieri	Mary E. Riccio	Felicia R. McKinnon	Jessie O. Sizemore
Jeanette R. Rogers	Carol L. Penney	Jay M. Brown	Farrell E. Sandals
Kelley A. Auringer	Margaret M. Loos	Martha Savage	Nicolette W. Perrault
Doris M. Vazquez	Rosemary F. Claire	Kathleen L. Ayr	Roche A. Samy
Barbara C. Trader	Susan L. Norwood	John C. Warner	Italo J. Mongillo
6_Robert J. Moore	Bonnie M. Osborne	Ivory Erkerd	Jane H. Platt
Laura F. Fernandes	Edward H. Fitzpatrick	Alice J. Mick	Gary D. Mikolinski
Michelle E. Sepulveda	Lucia Rafala	Sandra L. Willard	Janet M. Johnson
Marcella Flake	Anne M. Kavanagh	Francisco Cintron	Margaret H. Roberts
D. Jill Savitt	Sheila M. Martin-Corbin	Paul V. Cochrane	Stella J. Samuel
Eddie B. Rose	Joan Z. Jacobson	Sherree L. Verderame	Linda L. MacNaughton
Waltrina D. Kirkland-Mullins		Laura Spoerri	Synia J. Carroll-McQuillan
Kenneth B. Hilliard		Rose M. Mitchell	James E. Ramadei
Hermine E. Smikle		Angela Beasley-Murray	Sally B. Kaczynski
			Barry Yearwood
			Pearl E. Mitchell

* years of participation

Pamela J. Greene	Malanson	Joseph P. Binkoski	Julie Ann Reinshagen
Robert J. Winters	Kelley N. Robinson	Julie A. Carthy	David Howe
Sharon L. Mullen-Reynolds	Eugene V. Gandelman	Elizabeth C. Henderson	Judith Bellonio
Eugene B. Johnson	John K. Grammatico	Cheryl Morgan	Christine E. Calvanese
Ronald J. Jakubowski	Marcia L. Gerencser	Jenifer J. Blemings	Martha Rose Staeheli
Joyce M. Listro	Irma E. Garcia	Dwight H. Inge	Stephanie Glass
Robert F. Evans	Theresa M. Matthews	Laura A. Batson	Shteirman
Jean C. Gallogly	Majorie E. Hankin	Margaret E. Flynn	Rebecca Cochrane
Peter W. DePino	Jeanne Z. Lawrence	Victoria B. Mallison	Dina Pollock
Leigh Highbridge	Carol A. Viccione-Luce	Ann G. Magda	Liza L. Bowen
Afolabi J. Adebayo	Leslie E. Troppe	Nancy M. Kelly	Linda J. Baker
Jennifer Y. Blue	Patricia M. Bissell	Kathleen E. Torello	Andrea N. Bailey
Jennifer Drury	Karen E. Carazo	Devra L. Doolin	Jennifer Chisholm
David B. Howell	Victor J. Leger	Amelia M. Macklin	Elisha M. Danford-Brookover
William N. Duesing	Thomas E. Holmes	Marie I. Fadus	David Coss
Willie J. Elder	Daisy S. Catalan	Mattie H. Long	Stephanie Zogby
Lisa M. Galullo	Medria J. Blue	Phyliss Cummings-Teixeira	Michelle Sherban-Kline
Doreen L. Canzanella	Carmen Greenia	Alicia A. Koziol	Susan D. Brown
Peter L. Evans	Laura F. Pringleton	Bhim S. Kaeley	Kenneth P. Rogers
Eileen M. DeMaio	Saundra P. Stephenson	Jeremiah Gadsden	Concetta F. Welton
Dora Odarenko	Terence Ayrtton	Anne R. Fraulo	Rebecca Blood
Judith L. Falaro	Nancy T. Taylor	Marilyn Lipton	Donnamarie Pantaleo
Creola Smith	Richard B. Guidone	Margaret Krebs-Carter	Elizabeth Scheffler
Sandra L. Nash	Patrice M. Flynn	Paul Limone	Sherry Burgess
John M. Oliver	Holly S. Maio	Ralph L. Lambert	Leslie Abbatiello
Genoveva T. Palmieri	Trudy A. Anderson	Ann E. Fogarty	Dianne C. Marlowe
Sheldon A. Ayers	Barbara W. Winters	Dorothy Forbes	Douglas Von Hollen
Sophie R. Bell	1_Andrew Bram	Donna M. Lombardi	Judith J. Katz
Judith A. Puglisi	Mary B. Moore	Sherrie H. McKenna	Theodore Johnson
George E. Foote	Eric Carlson	Annette B. Chittenden	Karen de Fur
Joseph Wickliffe	Glen A. Hagemann	David A. Cicarella	Silverio Barroqueiro
Amber Stolz	Merrie N. Harrison	Rose B. Coggins	Rosemarie Crocco
Gerald A. Baldino	Kathy R. Harris	Edwina E. Johnson	Mongillo
Barbara J. Banquer	Gwendolyn F. Hampton	Janet L. Melillo	Andrea Sorrells
Robert L. Biral	Frank Caparulo	Frances F. Conte	Donna Frederick-Neznek
Sheila Wade	Ronald E. Byrd	Fred L. DiTallo	Leslie Fellows
Sharron Solomon-McCarthy	Robert J. Canelli	Maria A. D'Ulisse-Cupo	Leslie Grace Judd-Paier
Michael L. Burgess	Joseph G. Borkowski	Jose A. Delgado	Valerie Elizabeth Arrington-Steele
Susan M. Burke	Immacolata Canelli	Rosalind A. Davidson	Diana I. Pena-Perez
Lorna Edwards	Ruth E. Iosue	Erena Mazou-Skorik	Deborah A. Smereczynsky-Service
Giovanna M. Cucciniello	Madeline L. Carloni	Raymond S. Davie	Kevin P. Inge
Joyce P. Puglia-Calarco	Beatrice G. Bennett	Celeste Y. Davis	Monique Y. Gisser
Jimmy Lee Moore	Fred J. Acquavita	Mary Ellen McDevitt	Crystal P. LaVoie
Joanna M. Ali	Amy Aledort-Lehre	Marvel K. Davis	Mary Donahue
Pamela Tonge	Naomi Ayala	Kathleen V. Jurczak	Elisabeth Johnson
Judith E. Goodrich	Maryanne A. Muldoon	Bonnie S. Greene	David N. Reynolds
Robert P. Echter	Barbara Bailey	Laura E. Ortiz-DeOrue	Justin Boucher
Marcia A. Cohen	Beryl I. Bailey	Olivia J. Green	Mnikesa Whitaker
John L. Colle	Patricia A. Niece	Elizabeth S. Celotto	Matt P. Bachand
Kristi Shanahan	Jane Baljevic	Maria D. Laudano	Matthew D. Cacopardo
Diana T. Otto	Kenneth R. Hopkins	Carolyn E. Fiorillo	Martha C. Cavalieri
Jean Q. Davis	Charlotte H. Hylton	Janna Ryon	Dyanne D'Angelo
Susan A. Santovasi	Karen M. Battle	Michael D. Vollero	Shirley Ann Goldberg
Sandra I. Davis	Lou A. Bohman	Rodouane Nasry	Susan S. Gudas
Jon J. Moscartolo	Pearlie P. Napoleon	Toni L. Tyler	Jameka K. Sayles
Kristin Carolla	Jerome H. Bernstein	Patricia Morrison	
Marilyn A. Gaudioso	Gale Billingsley	Michael Golia	
Linda F. Frederick-	Bernette A. Mosley-Dozier	Cynthia Ann Wooding	
		Thomas Merritt	

Thomas C. Leaf
 Priscilla L. Luoma
 Luis E. Matos
 Michele L. Murzak
 Diane E. Powers
 Kathleen C. Rende
 Sara E. Thomas
 Jennifer M. Ulatowski
 Susan S. Van Biersel
 Diane M. Huot
 Jennifer J. Flood
 Shannon L. Cohen
 Marlene H. Kennedy
 Christine Picon-Van
 Duzer
 Joseph Raffone
 Virginia Seely
 Russell H. Sirman
 Kimberly Workinger
 Jessica J. Zelenski
 Judy Zurkus
 Kristen A. Borsari
 James P. Brochin
 Thomas D. Sullivan
 Crecia C. Swaim
 Barbara K. Smith
 Tina M. Diamantini
 Mindi R. Englart
 Erica M. Forti
 Wendy J. Kimball
 Deborah A. James
 Evelyn F. Lawhorn
 Nehemia Levin
 Thomas P. O'Connor
 Malini Prabakar
 Anthony F. Magaraci
 Zoila M. Brown
 Juanita W. Williams
 Willie J. Whipple
 Martha T. Youngblood
 Madeline M. Zelonis
 Mary K. Baba
 Josephine F. Ablamsky
 Nancy P. Cowdin
 Lisa A. Omark
 Phyllis S. Grenet
 Barbara A. Moss
 Joshua E. Perlstein
 Anita G. Santora
 Joseph Weber
 Carol A. Wong
 Linn M. Bayne
 Silvia D. Ducach
 Christina M. Frodsham
 Lillie M. Jones
 Delores Marshall
 Christi L. Quick
 Penny Snow
 Marisa B. Atanasoff-
 Frisk

Michele M. Massa
 Sylvia C. Petriccione
 Gary P. Smith
 David L. Parsons
 William Perez
 Doreen S. Peterson
 Diane L. Pressler
 Helaine R. Rabney
 David P. Raccaro
 Gwendolyn I.
 Richardson
 Maxine Richardson
 Verdell M. Roberts
 Kathleen M. Ryerson
 Carol A. Wells
 Helen H. Sayward
 Anne M. Wedge
 Geoffrey P. Smith
 Patrick J. Snee
 Mary R. Sorrells
 Kathleen M. Spivack
 Steven R. Strom
 Debbie D. Sumpter-
 Breland
 Jyo K. Teshima
 Bernice W. Thompson
 Annette Vetre
 Sara F. Barton
 Andrea H. Sadick-
 Brown
 Yoselin Roman
 Pamela R. Augustine-
 Jefferson
 Patricia I. Augustine-
 Reaves
 Rebecca S. Brown
 Alina Chrostek
 Lucretia F. Edlow
 Steven F. Gray
 Jennifer A. Kennedy
 Donna L. Timmone
 Charlene Andrade
 Elizabeth I. Kryszpin-
 Johnson
 Kathleen A. Gray
 Cynthia E. Wilson
 Anthony F. Vuolo Jr.
 Eleanor G. Willis
 Johanna M. Wilson
 Elizabeth J. Corrado
 Anthony B. Thompson
 George C. Peterman
 Joseph J. O'Keefe
 Carol S. Heidecker
 Kim Baldwin
 Yolanda G. Jones-
 Generette
 Rolanda A. Booker
 Jannine L. Farrell
 Lucille Camera

Toni D. Cates
 Maxine E. Davis
 Margaret A. DeMarino
 Jeffry K. Farrell
 Bradley H. McCallum
 Winnifred E. Morgan
 Albert A. Orsillo
 Eva M. Scopino
 Trisha A. Turner
 Christine E. Arnini
 William M. Dillon
 Sylvia J. Sherertz
 Nancy S. James
 Paulette J. Byer
 Michael S. Guzzio
 Cheree B. Knight-
 Camara
 Gretchen L. Gallagher
 Vanessa E. Clayton
 Frances Tilghman
 Rita M. O'Keefe
 Kevin S. Miller
 Theodore Parker, Sr.
 Eva de Lourdes Diaz

Seminar Leaders

13_Thomas R. Whitaker
 8_Bryan J. Wolf
 7_Traugott Lawler
 Robin W. Winks
 5_Robert A. Burt
 Jules D. Prown
 Rogers M. Smith
 4_Paul H. Fry
 Roberto González
 Echevarría
 William Kessen
 John P. Wargo
 3_Jean-Christophe
 Agnew
 Kent C. Bloomer
 Robert B. Stepto
 James A. Winn
 2_Michael G. Cooke
 Sandra H. Ferdman
 Comas
 James T. Fisher
 Howard R. Lamar
 Antonio C. Lasaga
 Lawrence G. Manley
 Mary E. Miller
 Richard S. Miller
 Sylvia Molloy
 Cynthia E. Russett
 Dr. Margretta R.
 Seashore
 Nicolas Shumway
 Sabatino Sofia
 Karl K. Turekian

Charles A. Walker
 Peter P. Wegener
 Robert G. Wheeler
 Robert J. Wyman
 1_Ronald C. Ablow
 Dudley Andrew
 Walter R. Anyan, Jr.,
 M.D.
 Robert E. Apfel
 William R. Bennett, Jr.
 Victor Bers
 Richard H. Brodhead
 Gary W. Brudvig
 Shelley Burt
 Laurence A. Cole
 Robert M. Cover
 Dr. Mark R. Cullen
 Charles T. Davis
 John P. Demos
 Edward H. Egelman
 Richard W. Fox
 Arthur W. Galston
 Gordon T. Geballe
 Martin D. Gehner
 Alessandro Gomez
 Robert B. Gordon
 Joseph W. Gordon
 Laura M. Green
 Roger E. Howe
 Amy Hungerford
 Robert D. Johnston
 Helen B. Lewis
 Ellen Lust-Okar
 Maurice J. Mahoney
 J. Michael McBride
 Ross C. Murfin
 Charles Musser
 Alexander Nemerov
 Dr. Alvin Novick
 Patricia R. Pessar
 Brigitte M. Peucker
 Daniel E. Prober
 Bruce M. Russett
 Marni A. Sandweiss
 Harold W. Scheffler
 Robert Schultz
 Ian Shapiro
 H. Catherine W.
 Skinner
 Ronald B. Smith
 James A. Snead
 Frederick J. Streets
 Robert H. Szczarba
 William G. Thalmann
 Alan Trachtenberg
 Henry A. Turner, Jr.
 Maurice O. Wallace
 Robert B. Westbrook
 Werner P. Wolf

SELECTED BIBLIOGRAPHY

Institute Publications

- Centers for Professional and Curriculum Development.* New Haven: Yale-New Haven Teachers Institute, 1996.
- "The Collaborative Spirit in Historical Perspective." *On Common Ground.* Number 2, Summer 1994.
- Curriculum Units by Fellows of the Yale-New Haven Teachers Institute.* 165 Volumes, 1978-2004.
- "Diversity, Partnership, and Community." *On Common Ground.* Number 7, Fall 1996.
- "Educational Organization and Change." *On Common Ground.* Number 6, Spring 1996.
- Guides to Curriculum Units Written by Institute Fellows,* 1978-2004.
- Index of All Curriculum Units,* 1978-2004. New Haven: 2004.
- "Partnership and the Arts." *On Common Ground.* Number 5, Fall 1995.
- "Partnerships in Science and Technology." *On Common Ground.* Number 4, Spring 1995.
- Policies, Procedures, and Organizational Structure of the Yale-New Haven Teachers Institute.* Endorsed by the Yale Corporation, September 1994.
- A Progress Report on Surveys Administered to New Haven Teachers,* 1982-1990, with Preface by Gita Z. Wilder of the Educational Testing Service. New Haven: 1991.
- Report on the 1991 Conference on University-School Collaboration: Preparing Teachers and Curricula for Public Schools.* New Haven: 1992.
- Teaching in America: The Common Ground; A Report of the Yale-New Haven Teachers Institute.* New York: The College Board, 1985.
- Teaching in New Haven: The Common Challenge.* New Haven: 1991.
- To Motivate My Students: An Evaluation of the National Demonstration Project of the Yale-New Haven Teachers Institute.* Rogers M. Smith, The University of Pennsylvania, 2004.
- "Urban Partnerships." *On Common Ground.* Number 9, Fall 2001.
- "Who We Are, Where We're Going." *On Common Ground.* Number 1, Fall 1993.
- "The World of Work." *On Common Ground.* Number 3, Fall 1994.
- Yale National Initiative to Strengthen Teaching in Public Schools.* New Haven: 2004.

Published Articles

- Vivian, James R. "Empowering Teachers as Colleagues." In *College-School Collaboration: Appraising the Major Approaches.* Ed. William T. Daly. San Francisco: Jossey-Bass, 1985, pp. 79-89.
- _____. "Issues in Establishing and Developing an Educational Collaboration: The Yale-New Haven Experience." *Education and Urban Society* 19.1 (1986): 59-76.
- _____. "Partnerships and the Community." In *Our Mutual Estate: School/College/Business Partnerships.* Purchase: State University of New York, 1987, pp. 43-45.
- _____. Testimony before the Committee on Education and Labor, United States House of Representatives. *Hearings on the Twenty-First Century Teachers Act, Held in Los Angeles, CA, March 3, and Washington, DC, March 15,* 1990. 101st Cong., 2nd Sess., March 3 and March 15, 1990. Washington: Government Printing Office, 1990, pp. 306-337.
- _____. "Yale University: The Yale-New Haven Teachers Institute." In *School-College Collaborative Programs in English.* Ed. Ron J. Fortune. New York: Modern Language Association, 1986, pp. 14-24.

Videotape Programs

- Teaching on Common Ground.* New Haven: 1995.
- Excellence in Teaching: Agenda for Partnership.* New Haven: 1997.

ACKNOWLEDGEMENTS

Numerous individuals and foundations have made gifts and grants to the Endowment Fund for the Yale-New Haven Teachers Institute. The 2004 Institute programs were supported in part also by grants from the Howard Hughes Medical Institute, the Jessie Ball duPont Fund, and the Sherman Fairchild Foundation. The New Haven Public Schools, Yale's partner in the Institute, has supported the Institute's program in New Haven continuously since its inception.