

Annual Report 1999

Yale-New Haven Teachers Institute

Annual Report

1999

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 interschool 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 initiative to demonstrate that the approach it has taken for twenty years in New Haven can be tailored to establish similar university-school partnerships under different circumstances in other cities.

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

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HIGHLIGHTS OF THE REPORT

Introduction

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 this country. More than 60 percent of its public school students come from families receiving public assistance, and 85 percent are either African-American or Hispanic.

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 population of 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

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others in the same school and other schools through both print and electronic publication.

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.

Now completing its twenty-second year, the Yale-New Haven Teachers Institute has offered 136 seminars to 471 individual teachers, many of whom have participated for more than one year. The seminars, meeting over a five-month period, combine the reading and discussion of selected texts with the writing of the curriculum units. Thus far, the teachers have created 1,236 curriculum units. Over the years, a total of 71 Yale faculty members have participated in the Institute by giving one or more seminars. Forty-four of them have also given talks. Thirty-three other Yale faculty members have also given talks. At this date about half of these 104 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 online, 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, supported by the DeWitt Wallace-Reader's Digest Fund, that has now established partnerships between colleges or universities and school districts at four sites that are adapting 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 make it possible for them to work with the Yale-New Haven Teachers Institute over a period of three years, from 1999 through 2001.

The two major sections of this report therefore describe what are now the two complementary areas of activity for the Yale-New Haven Teachers Institute.

The Program in New Haven

This section of the report covers the offerings, organization, and operation of the Institute's 1999 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 the increasing teacher interest in Institute seminars, the content of the seminars that have been offered, the application and admissions process, the participants' experience in the program, and the preparation for 1999. With respect to long-range planning and program development, it describes the continuing progress in establishing Institute Centers for Curriculum and Professional Development in the schools, placing more Institute resources online, and providing computer assistance to the 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 also hope that its account of our local procedures may prove useful to those who have now established new Teachers Institutes in Pittsburgh, Houston, Albuquerque, and UCI-Santa Ana.

National Advisory Committee

The account of the National Advisory Committee occupies a hinge position in this report because this Committee serves in an advisory capacity for both the program in New Haven and the National Demonstration Project.

The National Demonstration Project

This section of the report covers the second of four years to be devoted to the National Demonstration Project that is supported by the DeWitt Wallace-Reader's Digest Fund. It begins by describing the roles played by the Yale-New Haven Teachers Institute in this Project. It then describes the first year of common work in which all five of the Teachers Institutes have been engaged. In doing so, it draws upon evaluations written by school teachers, university faculty, and directors from the four new Teachers Institutes who participated in the Orientation Session, the July Intensive Session (with its four National Seminars), and the First Annual Conference in October—all of which were held in New Haven. It also describes the establishment of the National Steering Committee and the National University Advisory Council, groups that are parallel to those in New Haven.

The report then describes the accomplishments of each of the four new Teachers Institutes. It sets forth the national accomplishments that have already occurred and are expected to occur. It comments upon the learning in New Ha-

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ven that is also taking place as a result of the National Demonstration Project. And it describes the ways in which the progress and the results of that Project are being disseminated and explains how the Institute's periodical, *On Common Ground*, will contribute to this effort.

The report then describes the internal and external processes through which the National Demonstration Project is being evaluated. Internal evaluations are being conducted by the four new Teachers Institutes and by the Yale-New Haven Teachers Institute as monitor of the Grant from the DeWitt Wallace-Reader's Digest Fund. These evaluations are providing a continuing account of the challenges and accomplishments of the Demonstration Project. The external evaluation, which is proceeding in collaboration with the internal evaluations, is being conducted by Policy Studies Associates, commissioned by the Fund to perform this task.

Looking toward the future, the report then points out the opportunity for further expansion of the group of five Teachers Institutes that has now been established.

Financial Developments

A final section of the report sets forth the recent developments in the continuing effort to obtain financial support for both the New Haven program and the National Demonstration Project.

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 1999 this process, which is described later in the report, resulted in the Institute's organizing seven seminars, four in the humanities and three in the sciences.

All seven seminars were assisted by a contribution from the New Haven Public Schools. With further support from endowment revenues the Institute offered the following seminars in the humanities:

> "Women's Voices in Fiction," led by Laura M. Green, Assistant Professor of English

"Art and Identity in Mexico, from the Olmec to Modern Times," led by Mary E. Miller, Vincent J. Scully Professor of the History of Art

"Immigration and American Life," led by Rogers M. Smith, Alfred Cowles Professor of Government

"Detective Fiction: Its Use as Literature and as History," led by Robin W. Winks, Randolph W. Townsend, Jr., Professor and Chair of History

With support from the Sherman Fairchild Foundation the Institute offered the following two seminars in the sciences:

"Human-Environmental Relations: International Perspectives from History, Science, Politics, and Ethics," led by John P. Wargo, Associate Professor of Environmental Risk Analysis and Policy

"Electronics in the 20th Century: Nature, Technology, People, Companies, and the Marketplace," led by Robert G. Wheeler, Harold Hodgkinson Professor Emeritus of Engineering and Applied Science

With support from the Henry and Camille Dreyfus Fund the Institute offered the following seminar in chemistry:

> "How Do You Know? The Experimental Basis for Chemical Knowledge," led by J. Michael McBride, Professor of Chemistry

A tenet of the Institute's approach has been to determine its offerings in response to the needs teachers themselves identify.

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, 1999, and the curriculum units themselves. Each Fellow has prepared a curriculum unit that she or he will use in a specific classroom. But each Fellow has also been asked to indicate the subjects and grade levels for which other teachers might find the curriculum unit to be appropriate. These are indicated parenthetically here for each unit.

Women's Voices in Fiction

This seminar read short fiction and novels by nineteenth- and twentieth-century English and American women authors. Essays by Virginia Woolf (A Room of One's Own), Tillie Olsen (Silences), and Alice Walker (In Search of Our Mothers' Gardens) framed the discussion, directing attention to the various ways in which women's literary voices have been silenced, and to the rediscovery in recent decades of their major contributions to the history of the novel. The novels included Charlotte Brontë's Jane Eyre, Jamaica Kincaid's Lucy, Sandra Cisneros's The House on Mango Street, Gwendolyn Brooks's Maud Martha, Kate Chopin's The Awakening, and Fae Ng's Bone. Shorter fiction included Charlotte Perkins Gilman's "The Yellow Wallpaper" and Tillie Olsen's "I Stand Here Ironing."

The curriculum units take a variety of approaches to the literature of female experience. Several units explore the family—as it appears to Kindergarten-age children, in the context of Chinese culture, and through the words of African-American women writers. Two units focus on mothers and daughters in novels, films, and short stories. Several units place a single work in its historical context, in its contemporary cultural context, or in its biographical context. One unit pairs Black and White authors to illuminate the "ongoing conversation" among American women writers, and another turns to contemporary short stories by women to engage students' interest in the aesthetic and formal aspects of literature.



The seminar on "Women's Voices in Fiction." (From left to right: seminar leader Laura M. Green; Fellows Francine C. Coss, Jean E. Sutherland, Angela Beasley-Murray, Geraldine M. Martin, and Lisa M. Galullo.)

This seminar read short fiction and novels by English and American women authors.

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A team of three teachers (from grades 1, 2, and 3) and a library media specialist from L. W. Beecher Elementary School—Geraldine Martin, Jean Sutherland, Jean Gallogly, and Francine Coss—prepared related units for a project designed to help students learn about families of different cultures, using children's literature written by women authors.

The curriculum units written in the seminar, with their recommended uses, included: "Sister Outsiders: Black and White Women Writing in America," by Leslie A. Abbatiello (Honors American Literature, grade 11); "The Politics of Gender in The House on Mango Street," by Angela Beasley-Murray (English and Reading, grades 10-11); "This is Not a Story to Pass On': Teaching Toni Morrison's Beloved," by Sophie R. Bell (English and History, grades 10-12); "My Family: Gender Differences and Similarities," by Francine C. Conelli-Coss (Language Arts, grades K-5); "Mothers Represented in Short Stories by Women," by Sandra K. Friday (English Literature and Writing, grades 9-12); "Louisa May Alcott: Her Life, Her Times and Her Literature," by Jean C. Gallogly (Literature and Social Studies, grades 3-5); "Gothic and the Female Voice: Examining Charlotte Perkins Gilman's 'The Yellow Wallpaper,'" by Lisa M. Galullo (English, grades 9-12); "Daughters Come of Age in Women's Fiction," by Dianne C. Marlowe (English Literature and Writing, grades 9-12); "Wednesday and Friends: Looking at the Chinese Family Through the Eyes of Women Authors," by Geraldine M. Martin (Reading and Language Arts, grade 1); "Examining the African-American Family Through the Eyes of Women Authors," by Jean E. Sutherland (Language Arts and Social Studies, grades 3-5); and "Women Writers and the Contemporary Short Story," by Douglas F. von Hollen (Language Arts and English, grades 6-10).

Art and Identity in Mexico from the Olmec to Modern Times

In most classrooms in the United States, the history of the Americas begins with Massachusetts in 1620 or Jamestown a few years earlier. In this seminar Fellows worked to see alternative strands in American history and to understand how the question of identity in the past in Mexico relates to identity in the United States today. Their study of the Mesoamerican past, the Spanish Colonial era, and modern Mexico covered the Maya and Teotihuacanos, the Aztec on the eve of the Spanish invasion, the new imagery that took root in New Spain, the preoccupation with race and class that was reflected in the so-called Castas paintings, and the remarkable artistic production in twentieth-century Mexico.

The curriculum units can easily be adapted to different situations and levels and used in English, Spanish, or ESL classrooms. They have been developed to respond to state mandates regarding reading, writing, and mathematics curriculum: they show that such mandates can be met using fresh and imaginative classroom projects. They range from focused investigations of Maya and Aztec art and culture to new understandings of the works of Frida Kahlo. In every unit, hands-on projects play a key role: students can learn to make a work of modern Mexican folk art or play the rudiments of Mesoamerican music. Others offer preparation for tackling long-term projects, such as extensive mural-making. Most also incorporate ways of using local resources, especially museums and WPA Fellows worked to understand how the question of identity in the past in Mexico relates to identity in the United States today.

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The seminar on "Art and Identity in Mexico, from the Olmec to Modern Times." (Front row from left: Fellow Silverio A. Barroqueiro; seminar leader Mary E. Miller; Fellow Dora J. Odarenko, computer assistant Christopher B. Knapp, and Fellow Val-Jean Belton. Back row from left: Fellows Luis A. Recalde, Martha Savage, Mary E. Brayton, Kenneth B. Hilliard, Susan L. Norwood, and Pedro Mendia.)

mural programs that can easily be adapted to other regions of the U.S. Fellows have provided step-by-step guides to using compasses and learning the concepts of mapping, and they have made it possible to prepare a steaming platter of fresh tamales. In two units, they have written short plays that can be produced in the classroom.

The curriculum units, with their recommended uses, included: "The Aztecs: A Pre-Columbian History," by Silverio A. Barroquiero (World Cultures and Spanish I-IV, grades 9-12); "Popular Mexican Arts," by Val-Jean Belton (Advanced Art, grades 10-12); "Mexicans: Mythology, Movement and Masterpiece," by Mary E. Brayton (Theatre and Social Studies, grades 5-8); "Artistic Traditions of the Maya People," by Kenneth B. Hilliard (Music and Social Studies, grades K-8); "The Maya Culture of Mesoamerica: Art Works in Time and Space," by Pedro Mendia (Integrated Social Studies, Language Arts, and Mathematics through the Visual Arts, with the aid of Media Library and Technology resources, grades 2-4); "Diego Rivera: a Man and His Murals," by Susan L. Norwood (Social Studies, grade 4); "Broken Shields/Enduring Culture," by Dora J. Odarenko (Language Arts, Social Studies, Arts, and Science, grades 3-6); "Learning to Appreciate Art: The Influence of Mesoamerica on Mexican Art," by Genoveva T. Palmieri (Art and Social Studies, grades 11-12); "Popul Vuh," by Norine A. Polio (ESOL, Language Arts, and Social Studies, grades 4-8); "Art Images of Tenochtitlan-Past and Present: the Case of the Virgin of Guadalupe," by Luis A. Recalde (Art, Mathematics, Social Studies, and History, grades 6-12); and "Reflections in the Mirror: A Visual Journal and Mural Inspired by Frida Kahlo and Diego Rivera," by Martha Savage (Art, Language Arts, and English, grades K-12).

Immigration and American Life

This seminar examined primary sources on political debates over immigration from the founding era to the present, along with secondary sources detailing the

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major legislative developments in U.S. immigration history. The first half examined historical immigration debates, including those between the Jeffersonians and the Federalists, the Know-Nothings and their opponents, champions of Chinese exclusion and the literacy test, the adoption of the National Origins Quota system in the 1920s, and its repeal in 1965. Later sessions explored current immigration policies and controversies, including the relationships of immigrants to the U.S. economy, disputes over bilingualism and multiculturalism, and the impact of immigrants on U.S. politics. Discussions centered on why Americans historically had favored or opposed various sorts of immigrants and what current policies should be.

In their curriculum units, Fellows have adapted these themes for students in a variety of courses at a wide range of levels. One unit comprehensively documents U.S. immigration history while deriving from it a range of mathematical exercises; another similarly uses immigration statistics to teach graphing techniques. Others focus in revealing ways on more particular aspects of U.S. immigration history. Several feature particular groups of immigrants. These include the Italians, emblematic of the great immigration from southern and eastern Europe during the late 19th and early 20th century; Africans, involuntary immigrants to antebellum America who are only becoming a significant voluntary immigration stream today; and Puerto Ricans, not truly immigrants, yet not clearly fully equal U.S. citizens either. One unit uses representative figures from New Haven's past to tell the history of immigration in this city, a microcosm of immigration to America's northeast. Another focuses on the Irish in New Haven. Still another reverses perspectives, tracing how European immigrants affected the first migrants to this continent, the Native American tribes. One concentrates on a most controversial yet important issue related to current immigration, bilingual education. Another, recognizing that the drama of immigration has inspired great American novels, plays, and films, uses student research on immigration as preparation for training in acting and dramatic presentations.



This seminar examined primary sources on political debates over immigration.

The seminar on "Immigration and American Life." (Clockwise from front center: Fellows Joan A. Rapczynski, Michelle E. Massa, Elizabeth A. Scheffler, Joseph A. Wickliff, Michele E. Sepulveda, Carolyn S. Williams, Joyce Bryant, Peter N. Herndon, David J. Coss; and seminar leader Rogers M. Smith.)

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Curriculum units, with their recommended uses, included: "Immigration in the United States," by Joyce Bryant (History and Mathematics, grade 8); "Those Who Built New Haven," by David Coss (Social Studies and U.S. History, grades 4-12); "Native Americans and the Clash of Cultures," by Peter N. Herndon (U.S. History, World History, and Law, grades 9-12); "Immigration and American Life— Graphing Immigration Data," by Mary E. Jones (Mathematics, grades 6-8); "New Beginnings," by Michele E. Massa (Drama and Speech, grades 9-12); "The Italian Immigrant Experience in America (1870-1920)," by Joan A. Rapczynski (U.S. History, grade 11); "The Non-Immigrant Immigrants: Puerto Ricans," by Elizabeth A. Scheffler (History, grades 11-12); "St. Patrick—Symbol of Irishness," by Michele E. Sepulveda (History, grades 5-8); "African-Americans in Immigration and American Life," by Joseph A. Wickliffe (History, grades 11-12); "America's Future Culture," by Carolyn S. Williams (Social Studies, grade 7).

Detective Fiction: Its Use as Literature and as History

This seminar was based in part on Professor Robin W. Wink's book, *The Historian as Detective*. It had two major goals: to get students reading by introducing them to the single largest body of popular fiction in the United States—mystery, detective, and spy thriller fiction; and to demonstrate how historians ask and answer questions by using the fictional detective as though he or she were a historian. The works read included: Agatha Christie, *The Murder of Roger Ackroyd*; Geoffrey Household, *Dance of the Dwarves*; Colin Dexter, *Last Seen Wearing* or *Last Bus to Woodstock*; P. D. James, *An Unsuitable Job for a Woman*; Raymond Chandler, *The Big Sleep*; Robert B. Parker, *Looking for Rachel Wallace*; Dick Francis, *High Stakes*; Adam Hall, *Quiller Barracuda*; Ed McBain, *Lady Killer*; Mary Kittredge, *Fatal Diagnosis*; Tony Hillerman, *Dancehall of the Dead*; Walter Mosly, *Devil in a Blue Dress*; John Buchan, *The Thirty-Nine Steps*; Kenn Follett, *Eye of the Needle* (accompanied by the film); Josephine Tey, *Daughter of Time*; Ellis Peters, *Pilgrim of Hate*; James McClure, *The Steam Pig*; and Dorothy L. Sayers, *Nine Tailors*.



The seminar on "Detective Fiction." (Clockwise from front center: Fellows Kathleen Ware, Sandra L. Nash, Christine A. Elmore, Paul E. Turtola, John Mac Oliver, Hoyt G. Sorrells, Barbara W. Winters; and seminar leader Robin W. Winks.)

This seminar had two major goals: to get students reading and to demonstrate how historians ask and answer questions.

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The curriculum units offer material adaptable to a variety of age levels, from the early grades to advanced readers in high school. They reflect the four broad categories within the literature: the puzzle novel, or English "cozy," represented by Agatha Christie; the private eye novel associated with Raymond Chandler; the story of steady interrogation of evidence and of people, of testing the irrelevant clue against the environment, as in the police procedural, represented by the work of Ed McBain; and the classic novel of espionage, of the exercise of power over others through the finding and possession of information and the spread of disinformation.

Curriculum units, with their recommended uses, included: "Learning English Through Detective Fiction," by Daisy S. Catalan (English as a Second Language, grades 9-12); "Teaching Reading Comprehension and Writing Skills with 'Whodunits,'" by Christine A. Elmore (Reading, Writing, Language Arts, grade 3); "Wrapped in Mystery," by Sandra L. Nash (Reading and Language Arts, grades 5-8); "Reading Clues Closely," by John M. Oliver (Writing, Creative Writing, and English, grades 9-12); "Chocolate and Ice Cream Across the Curriculum," by Donnamarie Pantaleo (Special Education, grade 6); "Arousing a Child's Curiosity—What Is It?," by Gwendolyn Robinson (Reading, Phonics, Comprehension, Coordinate Geometry, and Geography, grades 3-5); "Lessons in Drama: Detective Fiction and the Interactive Audience," by Paul E. Turtola (English and Drama, grades 6-8); "Who Did Steal the Cookie from the Cookie Jar?," by Kathleen Ware (Reading and Language Arts, grades K-2); and "Using Detective Fiction to Raise Interest in High School Readers," by Barbara W. Winters (English [Repeat], Basic English, and Comprehensive English, grade 9).

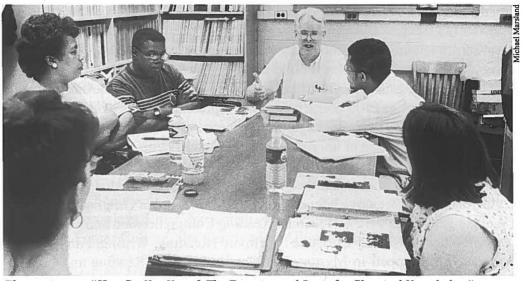
How Do You Know? The Experimental Basis for Chemical Knowledge

The goal of this seminar was to develop materials that would encourage students to ask "How do you know?" and to provide some answers. It was hoped that these materials would foster delight in mastering the logic of inference from experimental evidence. Discussions focused on molecular structure, bonding, and reactivity. The seminar first considered how the most powerful present methods for observing atoms and molecules work: scanning probe microscopy, which allows feeling individual particles, and x-ray diffraction, which revealed the double-helix structure of DNA. After discussing how quantum mechanics provides a theory for atomic and molecular structure, the seminar addressed the amazing fact that, in the absence of sophisticated instruments and theories, 19th century chemists were able to develop a detailed understanding of molecular structure. Most attention was focused on experiments from 1780 through the first half of the 19th century, which established the atomic nature of matter.

The Fellows developed curricular materials ranging from college-level second year chemistry to kindergarten-level special education. They surveyed, and incorporated in their units, experimental resources from text books, the primary chemical literature, and the World Wide Web. Some of them developed valuable original experiments. In general they developed activities that would engage the students' enthusiasm and their minds—including Socratic seminars on the atomic philosophy of the ancient Greeks, use of playground swings to discover harIt was hoped that these materials would foster delight in mastering the logic of inference from experimental evidence.

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The seminar on "How Do You Know? The Experimental Basis for Chemical Knowledge." (Clockwise from front left: Fellows Judith A. Puglisi, Sherry M. Burgess, Eddie B. Rose; seminar leader J. Michael McBride; Fellows Theodore L. Johnson and Michele M. Sherban-Kline.)

monic motion, close observation of familiar materials, putting the discovery of molecular genetics in a cultural context, and graphing important scientific data collected nearly 200 years ago. Some of the most imaginative activities are those developed for learning disabled students in elementary and high school. Though accessible to the students for whom they are designed, they also raise fundamental scientific questions that would make them appropriate, in slightly modified form, for all levels of science instruction.

Curriculum units, with their recommended uses, included: "Discovery Through Experimentation—Past and Present," by Sherry M. Burgess (Integrated Science, Chemistry, Physical Science, and General Science, grades 9-11); "Amazing DNA Molecule: Its History, Structure, and Function," by Monique Y. Gisser (Biology, grades 9-12); "The Rediscovery of Matter: A Historical Trek Through Classical Chemistry," by Theodore L. Johnson (Chemistry, grades 9-12); "Chemistry for Everyday Living," by Judith A. Puglisi (Special Education Science, grades 9-12); "Introduction to Chemistry," by Lucia Rafala (Special Education Science and Mathematics, grades K-5); "How Do You Know? Let's Try With Math," by Eddie B. Rose (Algebra and Statistics, grades 9-12); and "Infrared Spectroscopy: A Key to Organic Structure," by Michele M. Sherban-Kline (Advanced Chemistry, grades 11-12).

Human-Environment Relations: International Perspectives from History, Science, Politics, and Ethics

This seminar was designed to help teachers and their students to understand and critique claims that environmental or health damage has resulted from human action. Its topics included humanitarian concerns, disciplinary and interdisciplinary analyses, history and narrative, public sector innovation, the fragmentation of science and law, private sector innovation, patterns in arguments and logic employed in environmental debates, scientific uncertainty, values and ideology, and ethics. These topics were developed through examining a set of case studies on population growth, food and agriculture, land use and infectious disease, forest and

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ecosystem management, watershed management, indoor air and built environment, energy and climate change, land use and environmental health, product consumption and waste, environment and warfare, biodiversity loss, and protected areas.

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The curriculum units focus on a great variety of topics, including humanenvironment relations in the Doñana National Park in Andalucia, Spain; the response of plants to pollutants that also affect human health; the relations between asthma incidence and the environmental quality of the school; the integration of science and mathematics in interpreting effects of air pollution; the history and management of a city park, and the geology, hydrology, and ecology of the river that runs through it; basic concepts of ecology; and vector-borne disease, especially the transmission of parasites from other species to humans.

Curriculum units, with their recommended uses, included: "Human-Environment Relations: A Case Study of Doñana National Park, Andalucia, Spain, and the Los Frailes Mine Toxic Spill of 1998," by Stephen P. Broker (Environmental Science, Honors Anatomy and Physiology, grades 11-12); "Asthma and the Environment," by Richard R. MacMahon (Biology and Health, grades 9-12); "Making Wise Environmental Decisions," by Kenneth P. Rogers (Environmental Science and Science, grades 5-8); "Problem Solving Using Mathematics Spatially to Interpret Environmental Issues," by Creola Smith (Mathematics and Science, grades 6-12); "Edgewood Speaks: Politically, Historically, Scientifically, and Ethically," by Mary E. Stewart (Science, grades 6-9); "Abiotic Factors and Plants: A Local Pollution Study With Global Implications," by Maureen E. Taylor-French (Integrated Life Science, grade 7, and Integrated Earth Science, grade 8); "Are You Balanced With Your Environment?," by Yolanda U. Trapp (Environmental Awareness, Language Arts, Social Studies, Science, and ESL, grades K-4); and "The Impact of Poverty, Waste Management, and Ethics in the Control of Parasitic Infections," by Concetta F. Welton (General Science/Ecology, Life Science/Health, and Biology, grades 9-12).



The seminar on "Human-Environment Relations: International Perspectives from History, Science, Politics, and Ethics." (Clockwise from left: seminar leader John P. Wargo; Fellows Mary E. Stewart, Earnest Bell, Stephen P. Broker, Yolanda U. Trapp, Concetta F. Welton, Kenneth P. Rogers, Maureen E. Taylor-French, and Richard R. MacMahon.)

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Electronics in the 20th Century: Nature, Technology, People, Companies, and the Marketplace

This seminar dealt with a variety of topics, including communications and warfare, digital electronics, solid state electronics, the space race and ballistic missiles, the field effect transistor, technologies impossible without integrated circuits, and possibilities for the future. Books included were Christopher Evans, *Making of the Micro*; Hans Queisser, *The Conquest of the Microchip*; and Roman Kuc, *The Digital Information Age*.

The curriculum units, prepared for classes that range from Kindergarten to grade 12, deal with a wide range of topics. One unit uses the event of the Titanic catastrophe to teach methods of finding informational source materials. Three units explore the physics of force at a distance in ways designed for primary level students. Another unit, focusing on issues of pregnancy and childbirth for students in a transitional school, reviews some of the diagnostic instruments that have become available in the last two decades. Another shows how the computer has been adapted for use by the visually handicapped, though the design of Web sites and Web pages can either enable or frustrate such persons. Another contrasts modern computer technology as a revolutionary event with the Industrial Revolution. And another encourages students to write scientific fiction based upon their speculations on future science.

Curriculum units, with their recommended uses, included: "From Dusty to Digital: Using Primary Sources in the Information Age—Researching Titanic," by Gail G. Hall (History, Social Studies, and Library Media, grades 9-12); "Introduction to Magnetism and Basic Electronics," by Rebecca E. Blood (Science and Literacy, grades K-1); "Modern Electronic Inventions: Changing the Way People Live," by Roberta A. Mazzucco (Science and Social Studies, grades 2-5); "Technology at Home: An Increase in the Quality of Living Due to Electronic Inventions," by Jacqueline E. Porter (Science, grades 5-8); "Medical Tech-



The seminar on "Electronics in the 20th Century: Nature, Technology, People, Companies, and the Marketplace." (Clockwise: seminar leader Robert G. Wheeler; Fellows Bonnie M. Osborne, Roberta A. Mazzucco, Joanne R. Pompano, and Gail G. Hall.)

Annual Report: The Process of Determining the Seminar Topics

nology Related to Childbirth and Pregnancy," by Bonnie M. Osborne (Special Education Science and Parenting, grades 9-12); "Designing Accessible Websites for Blind and Visually Impaired," by Joanne R. Pompano (Blind and Visually Impaired, grades 7-12); "The Cultural Impact of Computer Technology," by Sheldon A. Ayers (Sociology, Current Events, and World History, grades 9-12); "From Science Fact to Science Fiction," by June M. Gold (English, grades 7-9).

The Process of Determining the Seminar Topics

Between October and December 1998, the teachers who serve 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 1999. (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 of the Institute then recruited Yale faculty members who were qualified and willing to lead seminars that engaged the desired topics. Their specific proposals were then considered and approved by the Representatives.

In their evaluations, the 1999 Fellows indicated that the Institute Representative for their school had been helpful in many ways: by maintaining frequent contact with them, asking for their views on seminar subjects for the following year, encouraging and assisting them to apply to the Institute, 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 Representa-

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

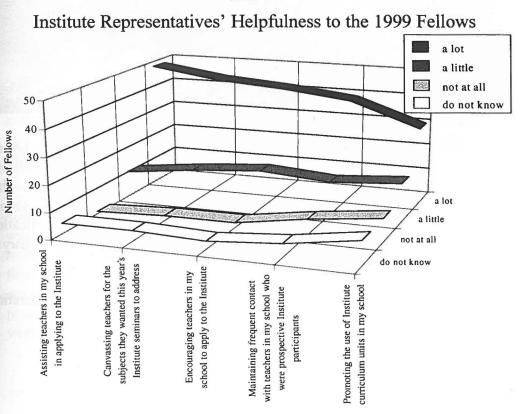


Chart 1

Harold Shapiro

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tives.) As a result, 46 (72 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 slightly greater satisfaction with these arrangements than reported last year (68 percent).

The Fellows' Application and Admissions Process

Having worked with teachers in their respective schools during the preceding months, the Institute Representatives met on January 5 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 12 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 attended and conducted discussions in small groups with interested teachers.



School Representatives meeting. (Fellow Stephen P. Broker.)

On January 19 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 26. 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:

1. 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

Annual Report: The Fellows' Application and Admissions Process

2. 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

3. 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

4. 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 some 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.

During the planning process 95 teachers expressed definite interest in participating in one of the seminars to be offered. Of those teachers, 42 were from high schools, 6 from transitional schools, 28 from middle schools, and 19 from elementary schools. By the application deadline, the Institute Representatives, assisted by the school Contacts, had obtained applications from 81 elementary, middle, and high school teachers in the humanities, social sciences, and sciences, somewhat fewer than the record numbers of the previous four years.

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 must 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 admitted to the program as individual Fellows. And the Institute encourages such Fellows to work as informal teams in their schools.

The applications were then reviewed by three groups: seminar leaders, school principals, and seminar Coordinators. The seminar leaders examined the

The small size of the seminars is necessary for the collegiality of the Institute experience.

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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 are accepted.

At the same time, the applications were reviewed in the applicant's own school, in keeping with a recent decentralizing of administrative functions and decision-making in the school district. The Institute's Representative for each school contacted the school principal to determine who should be involved in this building-level review. The intention is to increase awareness within each school of the projects that teachers wish to pursue in Institute seminars and to afford an opportunity for the principal and other educational leaders to examine the relationship between teachers' applications and school plans. In a letter of January 21, 1998, to all principals, Reginald Mayo, Superintendent of the New Haven Public Schools, had said: "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 prospects for advancing each school's academic plans." This process informs the consideration of each application, provides each applicant pertinent feedback, and often provides a significant opportunity for Institute Representatives to talk with their principals about the Institute.

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. These Coordinators are selected by the Director from the group of Representatives who had earlier helped to plan the program of seminars. 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:

1. 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

2. To monitor the progress of a seminar through observation and conversation with participants, and to give progress reports at weekly seminar Coordinators' committee meetings

3. 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

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

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-Reginald R. Mayo, Superintendent of New Haven Public Schools

Annual Report: The Fellows' Application and Admissions Process

4. 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

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5. 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

6. 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

7. To attend and come prepared to weekly committee meetings with the Director on Wednesdays at 4:00 p.m. (beginning March 1) 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 served as an admissions committee. They met after school on February 3 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 10 the Coordinators met again for a full day, by taking professional leave, for their final consideration of and decisions on the 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. A meeting of seminar leaders and Coordinators was held on February 25 to discuss the admissions process just completed, and to review the seminar and unit writing process and the policies and procedures of the Institute. On February 26 the Institute accepted as Fellows 74 New Haven teachers, 46 in the humanities and 28 in the sciences. One team of teachers was admitted with the expectation that team members would coordinate their curriculum units and work together during the school year, planning cross-grade and cross-department instruction and school-wide activities.

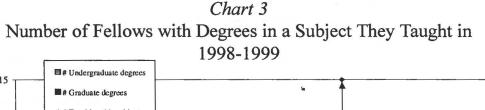
Consistent with the Institute's aim to serve the largest possible proportion of all New Haven teachers, 21 (or 32 percent) of the teachers accepted in 1999 were participating in the Institute for the first time. Of these first-time Fellows, 12 were in the humanities and 9 were in the sciences. About one-quarter (24 percent) were Black, slightly less than three-quarters (71 percent) were White, and 5 percent were Hispanic. The Institute seeks to ensure that all Fellows participate in seminars that are applicable in the courses they teach.

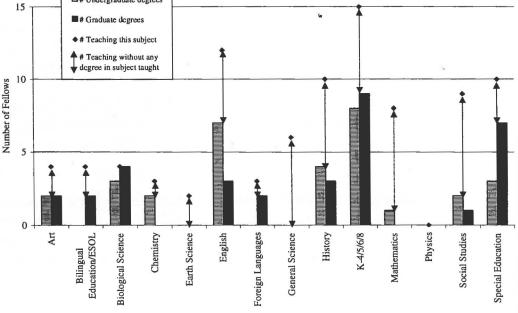
The Fellows Who Were Accepted

Fellows came from 6 of the 8 high schools, 8 of the 9 middle schools, and 2 of the 5 transitional schools. Of the 27 elementary schools, 11 had teachers participating. The Institute first admitted elementary school teachers in 1990; this year 18 (25 percent) of all Fellows were elementary school teachers. Thirty-three percent were middle school teachers, and 36 percent were high school teachers. Four schools had five or more Fellows; twelve schools had three or more. Overall, about 27 percent of the Fellows were 41-50 years old; 35 percent were younger and 35 percent were older.

As Chart 2 (facing page) shows, about one-fifth of the Fellows (21 percent) had four or fewer years of total experience in teaching. The Institute attracted a slightly lower proportion (18 percent) of teachers with 20 or more years of total experience in teaching. More than one-third (37 percent) of the Fellows, however, had four or fewer years of experience teaching in the New Haven school system. Illustrative of the need for the professional development that the Institute provides, almost half (47 percent) of all Fellows have been in their present teaching position four or fewer years; more than three-quarters (76 percent) have taught in their present position for nine years or less. Thus, even though 54 percent of the Fellows have 10 or more years total teaching experience, almost half have four or fewer years 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.

Moreover, as in past years—and as is the case in the school system generally—many of the 1999 Fellows did not major in college or graduate school in the subjects they currently teach. As Chart 3 shows, in no field except biological

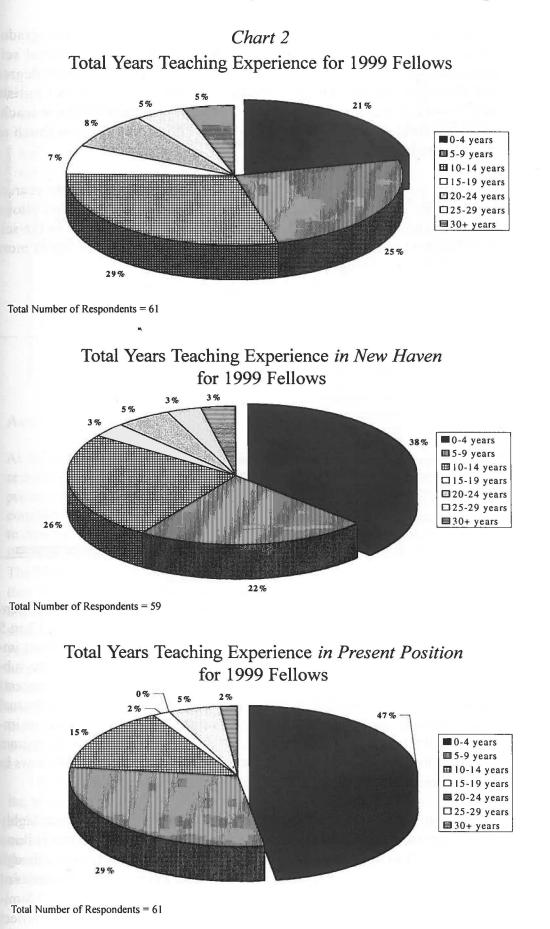




Many of the 1999 Fellows did not major in college or graduate school in the subjects they currently teach.

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Annual Report: The Fellows Who Were Accepted



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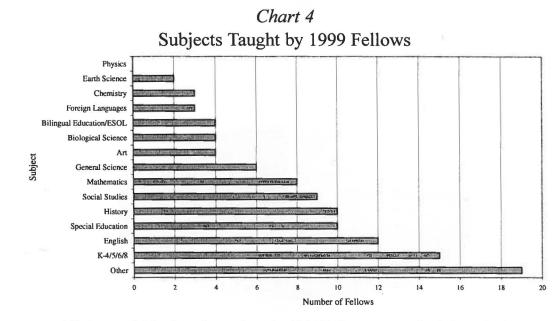
experience in their

present position.

or fewer years

science did all Fellows teaching a subject have a graduate or undergraduate degree in that subject. In three fields—earth science, general science, and physics—no Fellows had a graduate or undergraduate degree in a field they taught. Of the Fellows teaching in the field of English, only two-thirds had an undergraduate or graduate degree. Of those teaching in the field of social studies, fewer than one-fourth had so much as an undergraduate degree.

Chart 4 shows the subjects Fellows taught in the 1998-1999 year of their Institute participation. Overall, more than half (52 percent) of Fellows in the humanities and almost four-fifths (78 percent) of 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.

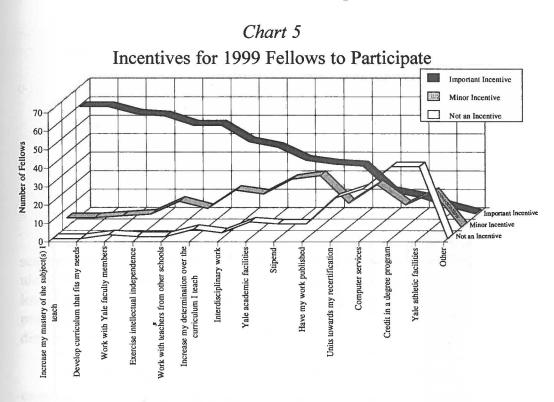


Understandably, therefore, when the 1999 Fellows were asked about the incentives that attracted them to participate in the Institute, they responded (as Chart 5 shows, reading left to right from the most to the least important) that the most important incentives were the opportunities to increase their mastery in the subjects they teach (92 percent), to develop curricula to fit their needs (92 percent) and materials to motivate their students (92 percent), and to exercise intellectual independence (87 percent). Indeed, incentives that might be imagined to be important for teachers with access to Yale University—credit in a degree program and access to Yale athletic facilities—were notably unimportant for Fellows in the Teachers Institute.

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 there are great disparities overall between the ethnic and racial characteristics of New Haven teachers and those of their students. (See Table 1 on page 24.) Similarly, the Yale faculty members who have led Institute seminars generally reflect the wider faculty at Yale.

More than half of Fellows in the humanities and almost four-fifths in the sciences had not majored in one or more of the subjects they taught.

Annual Report: Activities for Fellows



Activities for Fellows

At the first organizational meeting of each seminar, held on March 2, 1999, the seminar leader distributed an annotated bibliography on the seminar subject and presented the syllabus of readings that he or she proposed 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. One wrote, "The work-load was not light but also was not unmanageable. We averaged a book a week, two presentations related to the material being covered, and a discussion of our unit." Another wrote, "I was able to use in my curriculum unit several pieces of literature that were assigned reading for my seminar discussions. This was exciting because this was literature that I had not previously read." A third said, "Our seminar leader encouraged us to research more deeply than was necessary for the preparation of a secondary school curriculum unit, but the findings were extremely rewarding."

In contrast, some Fellows emphasized how demanding they found the reading to be. One said, "Sometimes the seminar became somewhat overwhelming with many readings, presentations and handouts to prepare, in addition to our curriculum units and classroom teaching preparation." Another said, "Even though the readings were quite interesting, there was so, so much to read. I found myself skimming through two of the books."

The seminar leaders also commented on what they perceived to be the Fellows' responses to the weekly readings. One said: "The work-load was not light but also was not unmanageable." —Institute Fellow

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

	White non=Hispanic			Black non-Hispanic			Hispanic				Other	
	All	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female
Institute Fellows, 1999	66%	13%	53%	27%	8%	19%	7%	5%	2%	2%	0%	2%
Institute Fellows, 1978-99	67%	21%	46%	28%	6%	22%	4%	'1%	3%	1%	0%	1%
New Haven Public School Teachers, 1999	69%	20%	49%	21%	4%	17%	9%	2%	7%	1%	0%	1%
New Haven Public School Students, 1999	12%	6%	6%	57%	29%	28%	28%	14%	14%	2%	1%	1%
Institute Coordinators, 1999	43%	0%	43%	43%	14%	29%	14%	14%	0%	0%	0%	0%
Steering Committee, 1999	75%	25%	50%	0%	0%	0%	25%	25%	0%	0%	0%	0%
Representatives and Contacts, 1998	53%	9%	44%	32%	5%	26%	14%	4%	11%	2%	0%	2%
Institute Seminar Leaders, 1999	100%	71%	29%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Institute Seminar Leaders, 1978-99	86%	70%	16%	9%	9%	0%	5%	4%	1%	0%	0%	0%
Yale Faculty, 1999 (includes tenured and term ladder faculty)	88%	67%	21%	2%	2%	0%	2%	1%	1%	7%	5%	2%

 Table 1

 Ethnicity and Gender of Participants

Totals may not add to 100% due to rounding.

Annual Report: Activities for Fellows

The quality of my seminar was often similar in quality to my graduate seminars. The Fellows bring experience and judgment to their studies in a way that is normally missing from an undergraduate seminar. Undergraduates normally bring stronger technical training in the sciences and mathematics, but less refined skills and ability to judge context and social relevance of the knowledge they study. Fellows intuitively understand what will be effective in the classroom, and they are in the seminar for a specific and common purpose—to develop innovative curriculum.

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 (89 percent) said that they had ample opportunity to discuss their choice of readings with the seminar leader.

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 18. The weekly meetings of the seminars continued through July 13, with Fellows submitting the second draft of their units on July 6 and their completed units by July 30.

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 from other Fellows and from the seminar leader. Although some seminar leaders have urged that the revised topic, preliminary reading-list, and first draft be submitted somewhat later, and some have informally instituted yet another draft between the first and second drafts, a high proportion of Fellows have been satisfied with this schedule. In 1999, 74 percent of the Fellows thought the unit writing deadlines occurred at the right time in relation to the school calendar.

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. One wrote: "Our seminar leader was extremely thorough in examining our various written drafts. Her suggestions related to organization and style were particularly helpful. She required and extra draft and gave assistance to anyone who was having difficulty." Another wrote: "Because writing a curriculum was my reason for participating in the Institute, I The Institute attaches great importance to the process through which Fellows develop their curriculum units.



Fellow Diane Platt and her students at Troup Magnet Academy of Sciences.

found it extremely helpful (if somewhat painful) to have input from the other teachers during the course of writing the curriculum." At the conclusion of the seminars, most Fellows indicated that the program schedule (74 percent) and the guidelines for writing a unit (95 percent) had been useful to them to a great or moderate extent.

This year 61 percent of the Fellows said they tried out the subject matter and 70 percent said they tried out the strategies of their units in their classroom. Of those Fellows who did, most (69 percent) said that this influenced what they included in the final units. One wrote, "I tested out much of the curriculum in the unit on my kindergarten class this year. It was well received, interesting and engaging for them. As a teacher it was very rewarding to see my students happily learning from the unit that I was designing."

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. Ordinarily, at least some current or prospective seminar leaders are included in this series, while some other faculty members are invited to speak on topics the school Representatives believe will be of particular interest to many Fellows. In 1999, as in 1998, the Representatives decided that all five talks should be given by current seminar leaders. In this way all Fellows could listen to an overview or an example of the work their colleagues are pursuing in other seminars—or, as in the case of Rogers Smith's talk, learn about a topic for a seminar in 2000. The talks given in 1999 were: "Human-Environment Relations," by John P. Wargo, Associate Professor of Environmental Risk Analysis and Policy; "Women's Voices in Fiction," by Laura M. Green, Assistant Professor of English; "Electronics in the 20th Century," by Robert G. Wheeler, Harold Hodgkinson Professor Emeritus of Engineering and Applied Science; "National Parks," by Robin W. Winks, Randolph W. Townsend, Jr., Professor of History; and "Constitutional Privacy in the 21st Century," by Rogers M. Smith, Alfred Cowles Professor of Government.

Fellows said they tried out the subject matter and the strategies of their units in their classroom.

Annual Report: Activities for Fellows



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Most Fellows saw in the talks the purposes for which they were organized.

Rogers M. Smith giving his 1999 talk on "The Right to Privacy in the 21st Century."

Although the talks have recently met with more favorable response than was once the case, they remain somewhat controversial. One Fellow wrote: "The talks, although I enjoy them, seem to me to lack purpose. I feel condescended to, as if I need a brush-up on liberal arts issues." Another wrote, in contrast: "I feel that the 'talks' are too specialized at times and not meant to hold the interest of people 'cruising' through the offerings." And another wrote: "I would like to see a rebuttal provided for those lectures based upon issues clearly partisan in nature."

Most Fellows, however, saw in the talks the purposes for which they were organized. They said that to a great or moderate extent the talks provided them intellectual stimulation (94 percent) and a sense of collegiality and common purpose among Fellows (90 percent). Three-quarters (78 percent) said the talks were successful in providing an overview of Fellows' work in the seminars. Most Fellows (92 percent) also said that the Institute scheduled the right number of talks. One Fellow wrote: "The faculty present just enough about the various topics to whet the appetite for more investigation and discussion." Another wrote: "The talks were always good, but this year they seemed more connected, in that they united the various seminars." And another wrote: "I thought the talks were very well targeted to the seminar topics and each offered a general knowledge to others who were not a part of the specific seminar."

Many Fellows reported that the talks prompted them to read about their topics (45 percent), discuss the topics with their students (52 percent), and discuss the talks with other teachers (74 percent).

As in recent years, the Institute scheduled a session on curriculum unit writing on March 16, well before the regular meetings of the seminars began. Before starting on their curriculum units, the Fellows all need to understand the central role that the process of writing plays in Institute seminars. As part of their admissions folder, all Fellows had received Institute guidelines and me"The talks were always good, but this year they seemed more connected, in that they united the various seminars." —Institute Fellow

chanical specifications for preparing curriculum units, which outline the Institute writing process and the five steps for Fellows' formulating, reformulating, and enlarging their individual units. During the session on curriculum unit writing, a panel of Coordinators first spoke briefly to all the Fellows about following the Institute process for unit development, considering one's audience, using a computer to write a unit and put it online, using the computer assistance the Institute and Yale University provide, and working together with other Fellows in writing and using units. Then the Fellows were divided into seminar groups, where each Coordinator led a discussion of purposes and practices in writing Institute curriculum units. This afforded an opportunity for the first-time Fellows to learn about the guidelines and other aspects of curriculum unit writing from experienced Fellows. At the same time, it encouraged experienced Fellows to share that experience, and it 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 seek their advice.

At the Coordinators' weekly meetings with the Director, which were held on the day 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 begin to define 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. Almost all Fellows (97 percent) agreed that the Coordinator had provided teacher leadership without diminishing the collegial rapport within the seminar. Almost all Fellows also said that the Coordinators helped them by facilitating discussion of Fellows' work in progress (95 percent), and by providing information about guidelines and deadlines for unit writing (98 percent) and about use of University facilities (95 percent). Few Fellows found the Coordinators unhelpful in any respect.

To maintain current information on the program and to address any problems that arose, the Institute Director met monthly with the seminar leaders as a group. This also afforded the seminar leaders, two of whom were conducting an Institute seminar for the first time, an opportunity to talk with each other about their approaches to the seminar and experiences in it.

Rewards for Fellows

The seminars have always been regarded as the core collaborative experience of the Institute, and each year the Fellows' comments about the seminars have been rich and positive. This year the Fellows often were very enthusiastic indeed. One said: "It has been one of the most positive experiences I've had in the four years that I have participated as a Fellow." Another Fellow said:

I felt as if I brought together so many aspects of who I am-

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

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teacher, scholar, writer, student—rather than being forced to be one-dimensional, as so many professional development programs require us to be.

Yet another Fellow said:

I applied to work in New Haven in part because the Institute is available to teachers there. It is the kind of collaborative effort in which I strongly believe, one that values high standards of teaching and of scholarship, seeing them as part of the same process rather than as the province of different levels of teaching.

Seminar leaders described their seminar in both specific and general terms. One said:

For the first five meetings I spoke for perhaps an hour . . . Beginning with the second hour, we would discuss the texts and the teaching challenges the texts posed. Where a text was clearly too difficult, violent, obscure, or raw for an age group, we discussed how this was so and sought out books written specifically for younger readers. In this the members of the seminar took the lead. From the sixth meeting forward we went directly into discussion, for by this time the seminar members were excited about the material, comfortable with it, and no longer inclined (as two or three had been) to be dismissive of it.

Another said:

Once we started teacher presentations, we had two or three a week. In these presentations, Fellows presented a single lesson plan of their unit, and the rest of us participated as if class members, whether 3rd graders or high school seniors. The result of these presentations was a great deal of cross-pollination among Fellows, who learned from each other and spun off new lesson plans based on what others proposed. Fellows also eagerly participated in analysis of others' lessons—and I think this criticism, both positive and negative, was so active because its basis was teaching, not scholarship—and the Fellows felt confident in their own pedagogy and in their ability to criticize the pedagogy of others.

A theme in Fellows' comments this year, as in many past years, was the appreciation and understanding they gained of their own and other cultures as a result of what they read. One Fellow wrote:

I have participated in the Institute for the last two summers developing curriculum that I have used in my U.S. History II survey course. I developed a unit on the Latino experience in America concentrating on Puerto Ricans, Mexicans, and "I applied to work in New Haven in part because the Institute is available to teachers there." —Institute Fellow

Cubans. We examined myths and stereotypes about each of the groups and learned to appreciate the strengths of their diversity.

Another Fellow wrote:

I was able to draw out from the students their first-hand experiences as regards their lives in their native countries and their present situations in their new country. These were all reflected in their use of the languages when they write journals and essays, discuss orally and listen to each other.

As some Fellows have already noted, the seminars afford them an otherwise too rare opportunity to talk and work with other teachers across the artificial boundaries that often separate grade levels, schools, and disciplines. Many Fellows this year spoke of the value of the Institute for them in these respects. One Fellow wrote: "Meeting educators from throughout the city is useful. I have been able to expand my professional relationships beyond the walls of my school." And another wrote:

Though the group contained four elementary teachers, one from middle school, and six who taught high school, there was considerable interaction among members of all groups. It was interesting to experience the varying reactions of Fellows to the material which was presented and discussed.

Ever since the Institute's inception, its participants and staff have sometimes been asked whether the co-professionalism among Yale faculty members and New Haven school teachers, for which the program is widely known, is authentic. The collegiality on which the Institute is founded is perhaps best illustrated by the mutual respect between Fellows and seminar leaders that the seminar experience engenders. Comments made this year, including some already cited above, are representative:

If I were to advise other faculty about this program, I would particularly ask them to think about their own childhood educational experiences or those of their children, just so that their expectations not be too high. At the same time, I would alert them to the fact that seasoned public school teachers often have many pedagogic skills unknown to Yale faculty—and so one can learn a great deal from the teachers. I particularly enjoyed the way Fellows presented lesson plans this year, and I have a few new cards up my sleeve for Yale students based on these experiences.

It is a wonderful and rewarding experience. Each week I truly looked forward to my sessions. There is a real world engagement often missing in University teaching that for me is exciting and filled with promise for social change. I would encourage faculty to consider the Fellows as colleagues whom they are joining on a journey. The faculty will probably learn

"I have been able to expand my professional relationships beyond the walls of my school." —Institute Fellow

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"I have a few new cards up my sleeve for Yale students based on these experiences." —Seminar Leader

Annual Report: Rewards for Fellows



The collegiality on which the Institute is founded is illustrated by the mutual respect between Fellows and seminar leaders.

Seminar leader Robert G. Wheeler and Fellow Roberta A. Mazzucco from the seminar on "Electronics in the 20th Century: Nature, Technology, People, Companies, and the Marketplace."

much more than the Fellows. Teaching Fellows is very different from teaching graduate students or undergraduates. Their level of judgment and intuition about what will work is quite mature. This makes them a delight to work with.

In turn, Fellows expressed their respect for their Yale colleagues. One Fellow said:

I appreciated my professor's expertise in her field. She was also able to balance that with an ability to make what we studied relevant to the high school classroom. I thought her attention to precise thought and language use was not only helpful but essential. Shouldn't we want to think and write as precisely as possible? Absolutely.

Another said:

It was truly a joy to see our seminar leader's excitement and enthusiasm about his field and to participate in the demonstrations and experiments he so carefully planned. He

certainly faced a challenge in trying to present very complex material to a group that was, with only one exception, nonscientists. However, the library media specialist, kindergarten teacher, second grade teacher, sociology teacher, special education teachers, and others also had a challenge in connecting the lectures and even the topic to our teaching experience and needs.

Yet another Fellow said:

We burst into applause at the end and begged for another seminar next spring; we felt transformed and yet only at the beginning of our study. We had also begun a bonding that we were loathe to give up. Much of this was due to the seminar leader, who is filled with energy, ideas, and respect for each of us. The seminar leader also introduced sophisticated topics in sufficient depth and with sufficient questions so that we were intrigued enough to want to go further.

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 work out 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 already indicated that each seminar approaches these demands somewhat differently as seminar leaders strive to strike an appropriate balance.

In recent years the Institute has also encouraged Fellows to build into their curriculum units both subject matter and skills that are called for by the local curriculum framework and the state Mastery Test. The various strategies for incorporating such elements in what may be quite individual and innovative units can provide stimulating discussion among the Fellows in a seminar.

In the end, a sizable majority of this year's Fellows (81 percent) said that there had been an appropriate balance in seminar between general study of the seminar subject and Fellows' work in progress on their units. As one Fellow put it: "I think there was a fairly good balance between unit work and the literature being covered. Perhaps more reactions to how the books we discussed could be or could not be related to the classroom could have proved interesting." A few others would have preferred either more time or less time discussing work in

"We felt transformed and yet only at the beginning of our study." —Institute Fellow

Annual Report: Results for the Participants

progress. One Fellow complained that "we never discussed each Fellow's unit in class because probably we lacked the time." But another Fellow wrote, "I would have preferred more time on the topics mentioned in the syllabus and less time on participant sharing of lesson plans (even though they were enjoyable.)"

After the curriculum 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, 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 synopses by the authors and their recommendations of the grade levels and school courses to which their units apply.

The Institute also updated the Index of all the 1,236 units contained in the 136 volumes the Institute has published since its inception in 1978. The Index and Guide, too, 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. At the same time, the Representatives conducted an inventory to ascertain whether each middle and high school has a complete set of all 136 volumes of units and whether all elementary schools have each of the volumes that their teachers believe are applicable at those grade levels.

Maintaining a library set of units has proved most difficult in those schools that do not have a full-time librarian or, in some cases, even a library. In 1993-94, the Institute therefore sought to determine the best location for Institute material to be deposited in every New Haven school, and it has since continued to supply units missing from any collection, insofar as the volumes have been still in print. As described below, the Institute has also created an electronic version that makes its curricular resources more widely accessible.

Results for Participants

As in past years, Fellows in 1999 spoke of the results of their Institute participation especially 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 (92 percent) to take part in the Institute, almost all (96 percent) said that they had gained knowledge of their subject and confidence to teach it by participating in their seminar. Only one Fellow differed with the statement that the seminar helped with intellectual and professional growth.

Many Fellows described the Institute experience as having increased their professional confidence and morale. Several of their comments follow:

Over the course of two years, I have gained a new perspective on history as an academic subject, as well as a commitment to use history in teaching other high school subjects. The Institute encouraged Fellows to build into their curriculum units both subject matter and skills that are called for by the local curriculum framework and the state Mastery Test.

"I find this Institute to be continuously supportive and helpful in my professional growth." —Institute Fellow

"The Institute is an intellectual and creative lifeline to many teachers." —Institute Fellow I find this Institute to be continuously supportive and helpful in my professional growth. It has been a great networking source, enabling me to meet other teachers to share information and educational experience.

The Institute is an intellectual and creative lifeline to many teachers; it has certainly begun to serve that function for me.

My overall conclusion is that the Yale-New Haven Teachers Institute is one of the top three reasons to be a teacher in New Haven.

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 (86 percent) access to Yale's academic facilities such as the library was an incentive for their participation, and 79 percent reported that membership in the Yale community had been greatly or moderately useful to them.

One Fellow said simply: "The opportunity for New Haven teachers to work with Yale faculty and to have access to the resources at Yale is invaluable." Another said, "There was a lot of sharing through an outside specialist in computer technology, visits to the Yale Art gallery, and visits to the Yale Art and Architecture building." And another said: "Having access to Yale facilities is great and I particularly value using Yale's libraries."

Nor do Fellows see the results of the Institute as limited to their own classrooms, or even to teachers who have participated in the seminars. More than 90 percent said that they plan to encourage or assist other teachers in using the unit



Fellow Jean E. Sutherland and students at her team's culminating activity at Beecher Elementary School.

Annual Report: Results for the Participants

they prepared; one-third said they planned to do so with four or more other teachers. As a group, the Fellows planned to encourage or assist a total of 233 other teachers. Fellows this year provided various accounts of the more extended influence the Institute has had, and will have, for themselves and their schools. Several Fellows wrote:

The unit will be team-taught with another Fellow and merged with her curriculum unit. The unit itself will be available to other teachers within our school for use in the classroom as a resource.

I will be able to integrate my material with reading, language arts, and social studies. Most lessons connect directly to New Haven's literacy goals. They will also mesh with the aims of our Social Development curriculum. I will be able to share some of my class's experiences with other classrooms which are members of our school team. Parents are also going to be involved specifically in some of the lessons I have planned.

With Title II of the Goals 2000: Educate America Act, which acknowledged the arts as core subjects comparable in importance to traditional content areas, and with testing and local mandates for interdisciplinary curricula, the push is on for innovative curriculum planning that breaks through traditional discipline-specific turf boundaries. I feel that the unit I have written will offer students a variety of approaches to this topic through mythology, philosophy, history, and creative dramatics, therefore bolstering their understanding of what they will be learning in their social studies classes.

I plan to share my lessons with teachers in my department so that they may choose to use my group research methods. As department head, I want to encourage more research-based activities. Also, I plan to take advantage of interdisciplinary opportunities with our visual arts and drama teachers, using my unit to expand project ideas. I have some ideas for mini-grants that would be spin-offs from my curriculum unit.

The curriculum unit will strengthen the school curricula tremendously as I am presently on a committee writing citywide science standards. For our Life Science course, the unit will be recommended as an integrated curriculum which addresses more than ten State Science Standards across the Earth/Life Science Curriculum.

Each 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 become Fellows and we also want the Institute to become a regular part of Fel"The curriculum unit will strengthen the school curricula tremendously as I am presently on a committee writing citywide science standards." —Institute Fellow

lows' professional lives. Both groups cite their own rewards. One first-time Fellow wrote: "As a professional development opportunity, the Institute is superior. It allows us to be professionals, to pursue our interests, and bring those into the classroom." Another wrote: "This was my first experience in the Institute and I thoroughly enjoyed and benefited from it. I especially enjoyed reading and discussing literature with other adults—teachers from the system. It was stimulating, and a welcome change from interacting only with students in the classroom." Another said: "In many ways, the Institute lifted and lightened this year for me. It was intellectually stimulating, dignifying, convivial—and fun. Even as it exhausted me, it gave me new energy."

For returning Fellows, the rewards of participation do not diminish over time, because the experience becomes cumulative, and not repetitive or redundant. In fact, a good many teachers report that the benefits increase as one has more experience as a Fellow. One returning Fellow wrote:

I am more comfortable participating in the Institute this year because I am prepared to write the unit and the topic I chose is fun and interesting in spite of the fact that I read twenty-five books (eighteen are required and the rest are extras).

Another wrote:

This is my fourth year to participate in the Institute as part of a team effort. This has been extremely helpful both for support in the Institute and networking with colleagues at one's school.

As in every year since 1990, when they became a regular part of the Institute, elementary school teachers spoke this year of the advantages of the Institute for them specifically. One said: "It was beneficial to me as a teacher of young chil-



Fellow Luis A. Recalde and seminar leader Mary E. Miller from the seminar on "Art and Identity in Mexico, from the Olmec to Modern Times."

"It was intellectually stimulating, dignifying, convivial—and fun." —Institute Fellow

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Annual Report: Teams of Fellows

dren to interact with those on the high school level. I believe that the Yale-New Haven Teachers Institute is one of the few chances available for such dialogue."

Seminar leaders, too, speak of what they gain from participation. They not only appreciate their expanded involvement in public education and the University's home community; they also find that there are often benefits accruing to their own scholarship and teaching. Presenting their experience is especially important because the Institute is often asked to explain the incentives and rewards for Yale faculty members who participate. Several seminar leaders this year said:

It is a learning experience in many ways. To view one's subject through the eyes of a teacher whose students simply do not read is a valuable corrective to assumptions a university academic often makes. One will learn about the very great problems of our nation's schools, problems which have become much greater over the years I have been teaching in the Institute.

The main benefit is a sense of having done what you can to help the community and its youth. Of course one realizes that this is only one candle, but it's good to feel you've tried. The Fellows are fun to work with, and it is good to help them have access to Yale's resources and to see how grateful many of them are, even when they don't have the time to use them fully. The experience may have given me a better sense of where some of our students are coming from. I did dig more deeply into some topics that will prove valuable in my academic year teaching.

The primary benefit is the opportunity to reconsider the body of knowledge we develop and teach to graduate and undergraduate students, to make it accessible to Fellows and students in secondary and primary education. In my own field, this has had an important effect in reshaping my research and scholarship. Schools are now one focus of my research. My work with the Institute has also made me sensitive to issues that arise from technical language. I now consider how to express my ideas using language intelligible to children. The primary benefit of teaching is that the faculty member is really the student. I have learned more about teaching from my Fellows than anywhere else in my career.

Teams of Fellows

For the past six years the Institute has admitted teams of at least three teachers from one school to a seminar with the expectation that the team members would coordinate the curriculum units they wrote and work together during the school year, planning cross-grade and cross-department instruction and school-wide "I have learned more about teaching from my Fellows than anywhere else in my career." —Seminar Leader

The use of the curriculum units in individual classrooms led to a culminating assembly that involved the entire school.



Students at the team's culminating activity at Beecher Elementary School.

activities. 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.

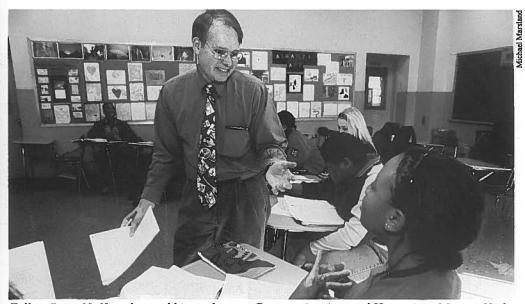
In 1999 a Fellows team from L. W. Beecher Elementary school once again participated in the Institute. Members of the team were enrolled in the seminar on "Women's Voices in Fiction." The team's joint project was "A Woman's View of Family." The related units dealt with gender differences and similarities in the family; the life, times, and work of Louisa May Alcott; the Chinese family through the eyes of women authors; and the African-American family through the eyes of women authors. It is the responsibility of a team to shape its curriculum units so that they lead to some shared culminating activity. As in previous years at Beecher Elementary, the use of the curriculum units in individual classrooms led to a culminating assembly and reception in the spring that involved the entire school, bringing in administration, support staff, and parents. One team-member said:

My unit is part of a team effort where my students along with students from other grade levels will participate in a drama production on stage. As a result of these efforts, I anticipate that my students will gain self-confidence in speaking and reading in front of an audience.

Benefits for Students

The ultimate purpose of the Institute is not only to strengthen teaching in New Haven's public schools, but also in this way to improve student learning throughout the schools. The Institute intends to serve students at all achievement and performance levels, and Fellows often write their units for students at more than one level. While most Fellows (73 percent) reported that their new curriculum units were designed for their "average" students, more than half (61 percent) reported that they were designed for their "advanced" students and more than half (56 percent) reported that they were designed for their "least advanced" students.

Annual Report: Benefits for Students



Fellow Peter N. Herndon and his students at Cooperative Arts and Humanities Magnet High School.

These excerpts from the plans of several Fellows illustrate the wide range of unit use in the schools.

I have been able to introduce a difficult, controversial book by an African-American woman into next year's English curriculum, which was badly needed in this district.

I will teach this unit next year in a team teaching situation, as I did my science unit last year. This curriculum will serve to motivate my co-teacher as well as my students. High-interest, hands-on science curriculum must become a priority in my department. In the past, special education students have not had equal access to science lab space and equipment. My science units have proven to administrators that quality curriculum can motivate low-achieving students as well as deter behavior problems.

Unlike many classroom teachers who often work in isolation from their fellow teachers, as a library media specialist I develop teaching and learning experiences and team-teach with subject specialists. I know that there will be teachers who will be very interested in working with me so that their students can improve their research skills, both in using the Internet and in using primary sources.

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. Fifty-seven of the Fellows planned to teach their unit to more than 25 students; 24 of that group 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 2,908. Chart 6 indicates the length of time the Fellows planned to teach the unit. For all Fellows, the unit is a significant part of their teaching plans.

"My science units have proven to administrators that quality curriculum can motivate lowachieving students." —Institute Fellow

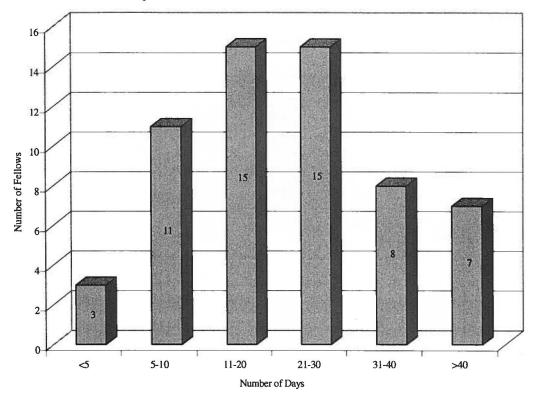


Chart 6 Number of Days 1999 Fellows Plan to Teach Their New Unit

Fellows continue to be optimistic about the responses they anticipate receiving from their students to the material they had studied and developed in the Institute. Most Fellows this year (83 percent) agreed that, as a result of Institute participation, they have a higher expectation of their students' ability to learn about the seminar subject. More than two-fifths of the Fellows (42 percent) strongly agreed with that conclusion. Fellows spoke about how their own enthusiasm for a subject would motivate students, and how they planned to involve students more actively in classroom learning. One Fellow said:

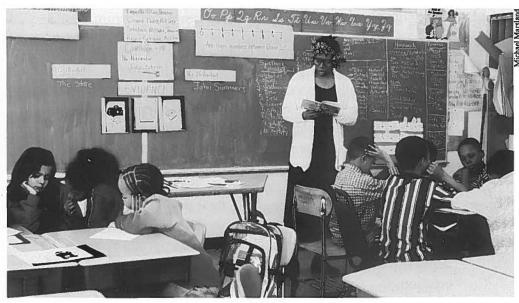
> I believe that my unit will spark a lot of interest among my students as we examine how women who have raised children relate to this responsibility. We will read about women who are negligent mothers, women who nurture, women who struggle with the responsibility of motherhood, and women who make mistakes as mothers. From here, students will look at their own mothers or the women who have raised them. Finally, they will consider their own role as present or future parents.

Another Fellow said:

I am pleased with the selection of children's mysteries that I have built my unit around, and I think this selection will motivate even my most reluctant readers. The major emphasis on improving literacy will be well-served with this unit, as its main objectives are to have my students read widely and write

Most Fellows this year agreed that they have a higher expectation of their students' ability to learn about the seminar subject.

Annual Report: Benefits for Students



Fellow Gwendolyn Robinson and her students at Katherine Brennan School.

for a variety of purposes including writing a mystery of their own. I am sure that my experimentation with a number of oral and written re-telling strategies will extend itself to my teaching of other subjects in the school curricula (i.e., science, report writing, etc.).

We also asked Fellows who had participated in the Institute in prior years to report on student responses they had actually observed when teaching units they had previously developed in the Institute. Their comments were very much in the same vein. One said:

In my school we do a lot of team teaching, combining subjects such as math and English or social studies and English or science and social studies. Our students benefited from our participation in the Institute because they saw their teachers as students; we were role models for them. They heard us talking among ourselves about our lectures and seminars. When we used our curricula, we told the students that they had been designed in our courses at Yale. It gave teachers and students alike a sense of learning together.

Another Fellow said:

In a previous unit which examined coastal ecology, students learned how to measure the pH of water at various points around New Haven Harbor at different times-after tides or storms. They used this information to assemble data and conclude when New Haven Harbor is most prone to pollutants. They also described and classified aquatic life around New Haven and proposed how pollutants might affect this life. They modeled the concept of bioaccumulation and extrapolated effects of pollutants in their own lives.

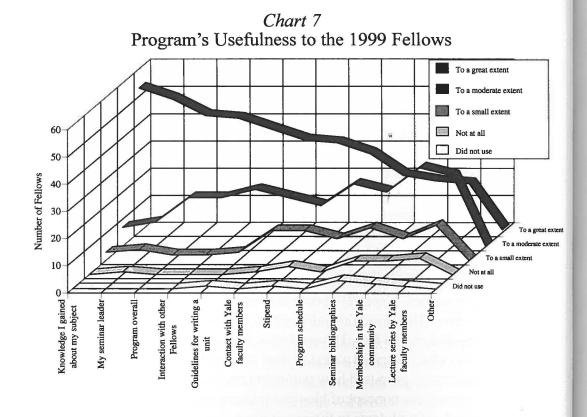
"The selection of children's mysteries that I have built my unit around will motivate even my most reluctant readers." ---Institute Fellow

And a third Fellow said:

The Institute has helped me to build a library of innovative curriculum units for my classes. We have addressed cultural diversity issues through units that focus on the poetry and culture of Mexico or the meaning of traditional Jewish holidays that become alive through literature, food, dances, and drama. Other units relate to themes on early pioneers, puppetry, and drama. I have discovered that non-interested students in the beginning of a project get caught up in the success of others and participate joyfully along with their peers. Sometimes this is due to a collective effort, such as making an animated movie in class or participating in a rehearsed drama production or being filmed reading a piece of one's own poetry with a puppet creation.

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 the seminar bibliographies and computer assistance, each aspect of the Institute was regarded as useful to a great or moderate extent, by three-fourths of the Fellows or more. More than two-thirds (70 percent) responded that favorably to the seminar bibliographies and two-fifths (40 percent) to computer assistance.



"Non-interested students in the beginning of a project get caught up in the success of others and participate joyfully." —Institute Fellow

Annual Report: Participants' Conclusions Overall

One seminar leader reached the following conclusions about the Institute this year:

It's very valuable for faculty members to learn more about the conditions in public schools today, the sources of over half our students and of many of the most challenging ones. A lot will also feel satisfaction in being a partner in the overall system of education. For me personally, this seminar was very useful in learning, for example, about experiences with bilingual education in New Haven, and in seeing the diverse views of the teachers on our topic. I was forced to rethink some of my own judgments in light of the information and attitudes I heard, and that's good, because these issues really are complex and difficult, with no easy answers. The rethinking the seminar prompted will undoubtedly affect both my teaching and scholarship. I've given some presentations differently already.

We also asked Fellows to provide their overall conclusions about the strengths and weaknesses of the Institute. One Fellow wrote:

One of the strengths of this year's program which was different from past seminars was the availability and use of computer technology. This has greatly enhanced the Institute since I last participated several years ago.

For another Fellow, however,

the most frustrating experience was trying to produce the document on a disk and using the computer. I do not own my own computer. Although clusters were made available as well as assistance in how to use the computers, the lack of one at home proved to be a great hindrance.

This Fellow went on to say, rather surprisingly for a teacher, "it is extremely difficult and frustrating to learn something and use it simultaneously." A third Fellow, who saw no weaknesses in the Institute, wrote:

The opportunity to participate in a seminar led by a Yale professor is invaluable. Each seminar over the years that I have participated in has been, of course, in a different subject area, which has broadened my knowledge and my perspective. The intellectual stimulation that these seminars have provided has helped to create a balance in my teaching career as I work with children for some 6 hours a day and then have the opportunity to read, discuss, and write about a variety of topics in an academic setting. I equally value the opportunity to interact with my peers from other elementary, middle, and high schools. "The rethinking the seminar prompted will undoubtedly affect both my teaching and scholarship." —Seminar Leader

Despite a range of specific complaints about scheduling and procedures, the Institute's offerings were generally received with enthusiasm, and the results of its program were quite consistently praised.

In their evaluations, almost all the Fellows said they intended to participate (73 percent) or might participate (16 percent) in the Institute in one or more future years. Of the six Fellows who did not intend to participate in the future, three have said that they are leaving the New Haven school system.

We should add that there are now 43 members of the administration of the New Haven Public Schools who have participated as Fellows of the Institute for periods of one to eighteen years. The increasing presence of former Fellows in positions ranging from Assistant Principal and Principal to Assistant Superintendent has clearly rendered the Institute more visible and has encouraged other teachers to participate in this program.

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 several years the Institute has been exploring how computing can enhance its partnership, because computing overcomes the barriers of time and distance that can impede collaboration, and because it is a non-hierarchical form of communication and therefore consistent with the collegiality that is a tenet of the Institute's approach.

In 1995 Fellows became eligible to purchase Yale computer accounts, and a number of Fellows have therefore had Internet access provided in this way. Although this option remains available, most Fellows now have other service providers. The Institute will also furnish current Fellows an Institute e-mail account at no cost, subject to certain conditions of use. Because at the outset a great many Fellows were unfamiliar with the use of computers, the Institute had engaged undergraduate and graduate students to serve as computer assistants to the Fellows, a role modeled to some extent on that of the computer assistants in the Yale undergraduate residential colleges. Later, because of an increasing familiarity with computing, the Institute referred Fellows to its own computer assistants and to the Internet Information Center, which serves the entire Yale community.

This year, however, the Institute has again offered more direct assistance from its own office. Because of the benefits to the Fellows and to other teachers that result from having the curriculum units online, the Representatives had decided that beginning in 1999, Fellows must submit their curriculum units and guide entries on disk. They are asked to follow the Institute's recommendations on word processing software and hand in the disk version of their second draft directly to the Institute computer assistant or the seminar leader, who checks them for formatting errors and readability. This procedure facilitates the process of putting them online.

Forty-three members of the administration of the New Haven Public Schools have participated as Fellows.

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Computing overcomes the barriers of time and distance that can impede collaboration, and is a nonhierarchical form of communication.

Annual Report: Electronic Resources and Assistance



Three-quarters of this year's Fellows sought to use the computer assistance available to them.

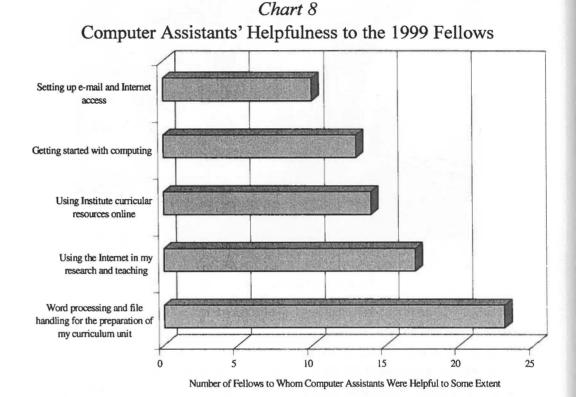
Demonstration of electronic resources at Yale. (Clockwise from front left: Fellows Dora J. Odarenko, Kenneth Hilliard, Susan L. Norwood, Pedro Mendia, Genoveva T. Palmieri, Val-Jean Belton, and computer assistant Christopher B. Knapp.)

The electronic resources and services available to Fellows therefore include many opportunities to learn about and use computing, regardless of previous experience and expertise. In 1999 Fellows received computer assistance on a variety of topics, which included getting started with computing, setting up an Internet and e-mail account, getting started on the Internet, using the Internet in research and teaching, using Institute resources online, and word processing and file handling for the preparation of curriculum units. The Institute is also establishing an online forum for teachers who are Institute Fellows or who have access to an Institute Center, through which they will be able to discuss Instituterelated topics and to help each other with computing problems. Discussion on the Electronic Forum will go on over an e-mail list. Any message sent to the list will be sent to anyone who subscribes to the list, creating a kind of group discussion.

Three-quarters of this year's Fellows (75 percent) sought to use the computer assistance available to them. Most who sought help did so in person (51 percent of all Fellows), many others by phone (27 percent), and some by e-mail (15 percent). For 46 of the Fellows (58 percent) 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 of their own previously acquired competence, or because of the availability of resources at home or school. A few said they did not do so because of time constraints during the school year.

Most who took advantage of the assistance, however, were full of praise for the expertise, the patience, and the persistence of those whom they consulted.

Of the Fellows who used the computer assistance offered them, 13 found the assistants helpful in getting started with computing; 10 found them helpful in setting up e-mail and Internet access; 17 found them helpful in using the Internet in research and teaching; 23 found them helpful in word processing and file handling for the preparation of a curriculum unit; and 14 found them helpful in using the Institute's curricular resources online. (See Chart 8.)



Electronic versions of the Institute's publications are now available at its Web site. The address is http//www.yale.edu/ynhti. The full texts of all 1,236 units written between 1978 and 1999, plus an index and guide to these units, are thus available to teachers online. Information about the Institute (its brochures and most recent Annual Reports) is also available, as is the text of its periodical *On Common Ground*. To call attention to this resource, the Web location has also 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 Institute has created a "guestbook" on its Web site, in order to invite comments and suggestions from those who have visited the site. In recent years the site has been used by more and more people in this country and abroad. In 1999 we heard from some in Scotland, Israel, Taiwan, Italy, and Hong Kong. From the very large number of guestbook entries, it is evident that the curriculum units written in New Haven have been of great value to teachers and others in the educational community.

The site has been used by more and more people in this country and abroad.

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For example, a teacher in the Performing Arts School of Metropolitan Toledo wrote: "This Web site will be a tremendous help. I am always looking for new ideas and methods." A teacher of geometry in Texas wrote: "It has motivated me to learn more about the history of mathematics." A research fellow in Dundee, UK, wrote: "We are compiling knowledge on education and the use of technology in education. Your site is fascinating, comprehensive, professional, and well-maintained." A school administrator in Washington, DC, wrote: "I am looking for African-American curriculum guides and resources. I find this site has some wonderful and very well-developed curriculum units. Keep up the good work." A foreign language department chair in Ohio wanted to share a curriculum unit with other department chairs, to investigate the possibility of team-teaching such a lesson. A teacher from Michigan wrote: "What a fantastic wealth of resources! Not only can I use this information to help with my master's research, but it will benefit my classroom as well!" From California we heard: "This would seem to be a great idea. I volunteer in some local school systems, and this could help me to help them." A teacher in Wisconsin wrote: "Why didn't I know about this earlier? I found it recommended on a Talk-net sponsored by the National Council of Teachers of English." And a teacher in Illinois wrote: "I have been using the site for over a year. It never fails me!"

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. In the next three 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 the larger schools, so that the majority of New Haven teachers will have a Center at their school or at a school near them. Eleven Centers are currently in operation. They are located at three elementary schools (L. W. Beecher, Clinton Avenue, and Davis Street Magnet), two K-8 Schools (Edgewood Magnet and East Rock Global Studies Magnet), three middle schools (Fair Haven, Jackie Robinson, and Roberto Clemente), and three high schools (Cooperative Arts and Humanities Magnet, Hill Regional Career, and Wilbur Cross). The Institute hopes to establish a twelfth Center at another high school.

These Centers are not permanent installations but must be annually renewed. A Center may remain in a school so long as the school has a need and a desire for it, but it can then be moved to another school. Moving Centers from school to school increases the 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 a sufficient leadership. It must be able to rely upon a favorably disposed school "I have been using the site for over a year. It never fails me!" —Illinois Teacher

administration and an appropriate school plan, and it must be located in such a position that the majority of the New Haven teachers will have a Center at their school or a nearby school.

The Institute and the New Haven Public Schools view the establishment of Institute Centers as a vital component of curriculum reform efforts system-wide. The Centers carry out school-based plans and address the District's "Kids First" goals, which call for more site-based management, improvement of curriculum and instruction, greater staff development, increased parental involvement, and improved physical condition of schools. The Centers directly address the first three of these goals and provide new opportunities with respect to the last two. They attempt to create in schools a place that will be conducive to the kinds of conversations teachers have with each other and with their Yale colleagues in Institute seminars. They are intended to increase the visibility and use of Institute resources and include teachers who have not before been Institute Fellows. They disseminate Institute-developed curriculum units more widely, and help the teachers to learn how to use curriculum units that are online, explore computing as a means of collaboration, and apply the Institute's principles in new ways within the school environment itself.

The Centers therefore operate from attractive and properly equipped rooms in the schools themselves, containing special furnishings designed by Kent Bloomer, 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.

Each Center also contains at least one computer with a high-speed modem so that the teachers have easy access to the Institute's Web site. At the beginning of the 1999-2000 academic year, the Institute upgraded the computer operating systems at the older Centers to Windows NT. The computers delivered to the newer Centers have this system pre-installed. Windows NT makes many notable improvements over the Windows for Workgroups 3.1 platform that was used previously on the Center computers. It is easier to use, has a fully graphical interface, and provides greater security. The Institute also inventoried all Institute resources in the Centers—curriculum units, center manuals, books, videos, etc.—and replenished them when possible.

The Centers carry out school-based plans and address the District's "Kids First" goals.

Annual Report: Institute Centers



The center of the table is filled with a circular design, the Institute logo multiplied as a continuous fret.

4

East Rock Global Studies Magnet School Center for Curriculum and Professional Development.

Schools interested in becoming a Center site must apply to the Institute's Steering Committee. An application, which requires the involvement of the school's principal and management team, must contain an Academic Plan for the calendar year, describing how the teachers in the Center will take full advantage of Institute resources while working on school plans that address the goals of the District. If a school is selected as a Center site, its Academic Plan must be updated and renewed each year.

Schools selected as Center sites become eligible to receive special resources and incentives from the Institute. These incentives, which are outlined in the Center booklet, assist with the Center's development as well as the implementation of its Academic Plan.

The Centers or Institute Fellows at Center schools may apply for minigrants from the Institute to implement approved aspects of their Center Academic Plan. During 1999 the Centers were supported by grants received in 1995 from the Sherman Fairchild Foundation and the Arthur Vining Davis Foundation (for high school Centers) and in 1997 from the Jessie Ball duPont Fund (for new Centers).

The Institute has developed a standard format (Center logs) for all Centers to use in documenting activities. In the early years Center Coordinators met monthly with the Institute's Director to review the activities of Centers and report on progress. In 1998 the Steering Committee decided to establish collaborative leadership at each Center, so that responsibility would be more widely shared and continuity could be more easily assured. A member of the Steering Committee is assigned to work with each Center's Coordinating Team. The members of the Coordinating Team share responsibilities for leading certain efforts within the Center, including documentation. Team members complete the required mid-year and end-of-year reports and are encouraged to document their

Center's work in a variety of ways, including video and audio tapes, photographs, and minutes of meetings.

The Assistant Director of the Institute is the primary liaison to the Centers, communicating frequently with Center leaders and visiting regularly each of the Center schools. She participates in the meetings of both the Institute Steering Committee and Center Coordinators and assists teachers in Center schools to prepare applications for mini-grants to support Center activities.

At the request of Center Coordinating Teams, the Institute now holds semiannual Forums on Exemplary Practices and Plans. These Forums have enabled lively discussion among the teachers and staff members and fuller exchange of ideas among the Centers.

The Forum held on June 7, 1999, considered a variety of topics, with presentations by Center leaders on activities at their schools. Steven P. Broker and Judith A. Puglisi from Wilbur Cross High School spoke on "Generating Enthusiasm for a New Center"; Lisa M. Galullo from Hill Regional Career High School spoke on "Handling a Center in Transition"; and Mary E. Jones from Roberto Clemente Middle School spoke on "Revitalizing an Established Center." A series of presentations dealt with curriculum development activities: Sheldon A. Ayers and Peter N. Herndon from Cooperative Arts and Humanities Magnet High School on "Designing an All-School Project: Spanish Cultures Week"; Joseph H. Lewis from East Rock Global Studies Magnet School on "Identifying Institute Units Related to the School Theme"; Mary E. Stewart and Toni E. Valshing from Edgewood Magnet School on "Preparing a Teacher Resource Guide"; and Waltrina D. Kirkland-Mullins and Jeanne Z. Lawrence from Davis



Spring Forum on Exemplary Center Practices and Plans. (Clockwise from front left: Waltrina D. Kirkland-Mullins, Sheldon A. Ayers, Mary E. Stewart, Toni E. Valshing, Judith A. Puglisi, Pedro Mendia, James R. Vivian, Yolanda U. Trapp, Jennifer Drury, Lisa M. Galullo, Francine C. Coss, Jean E. Sutherland, Peter N. Herndon, Deborah E. Hare, and Annette R. Streets.)

Semi-annual Forums have enabled fuller exchange of ideas among the Centers.

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Street Magnet School on "Preparing a Culminating Activity for Students." Another series of presentations dealt with professional development activities: Ida L. Hickerson from Jackie Robinson Middle School on "Using Center Resources to Develop Curriculum for New Teachers"; Sandra L. Nash from Fair Haven Middle School on "Introducing Interns to Institute Resources"; and Francine C. Conelli-Coss and Jean E. Sutherland from L. W. Beecher Elementary School on "Collaborating in the Use of Units."

At the Forum held on December 1, 1999, similar topics were discussed, but some quite new topics were also introduced. Grayce M. Storey from Jackie Robinson spoke on "Restructuring and Reorganizing an Established Center"; Waltrina D. Kirkland-Mullins from Davis Street Magnet spoke on "Continuing Activities in a Reorganized Media Center"; Joseph H. Lewis from East Rock spoke on "Conducting a Summer Academy and Follow Through Activities"; and Peter N. Herndon from Cooperative Arts and Humanities Magnet spoke on "Planning an All-School Event." The presentations on professional development activities included Stephen P. Broker and Judith A. Puglisi from Wilbur Cross on "Conducting Teacher Workshops"; Norma Rojas from Fair Haven on "Using the Center as a Recruiting Tool"; Lisa M. Galullo from Hill Regional Career High School on "Using Curriculum Units as Resources for Recruiting"; and Mary E. Jones from Roberto Clemente Middle School on "Using Center Resources to Integrate a Diverse Staff." The presentations on curriculum development activities included Mary E. Stewart from Edgewood Magnet on "Creating a Curriculum Guide"; and Jean E. Sutherland and Francine C. Conelli-Coss from L. W. Beecher on "Identifying Curriculum Units Applicable to Elementary Grades."

At both Forums there was also discussion of topics of general interest pertaining to the establishment, management, and renewal of the Centers. The Forums were well-attended and positive in tone. It was clear that the Centers have



Fall Forum on Exemplary Center Practices and Plans. (Clockwise from left: Sheldon A. Ayers, Peter N. Herndon, Joseph H. Lewis, Kim Chandler, and Mary E. Stewart.)

in various ways caused teachers to scrutinize many of the Curriculum Units that are available for their use. They have also become a means for teachers who may no longer be Fellows to stay involved with the Institute. Some teachers who came to the Forums had never been Fellows; and some of the reports mentioned the involvement of yet other teachers who had not been Fellows.

Several of the Centers this year have had to cope with moving to a new school facility, with renovations at their site, or with reorganizations of personnel. The newer Centers have also spent much time and effort in matters of initial organization. All of the Centers have accomplished a great deal, however, in spreading the word about the uses of the curriculum units. We mention here some of the other specific accomplishments and plans during 1999.

At L. W. Beecher Elementary School, teams of teachers have taken an Institute seminar every year since 1995, and the planning for and presentation of the culminating activity continues to involve a great number of Beecher teachers, students, administrators, support staff, and parents. During the spring of 1999 the team program involved over 125 students from all grade levels and required the integration of four units written during the 1998 seminar, "The Use and Abuse of History in Film." A team of four teachers enrolled in the 1999 seminar on "Women's Voices in Fiction" led by Laura M. Green, Assistant Professor of English. Another team of three teachers is continuing its project to identify, classify, and summarize Institute-developed curriculum units that could be used by elementary teachers not only in their own school, but also by teachers throughout the district. The results will be made available to all teachers at New Haven elementary schools, whether or not those schools have an Institute Center.

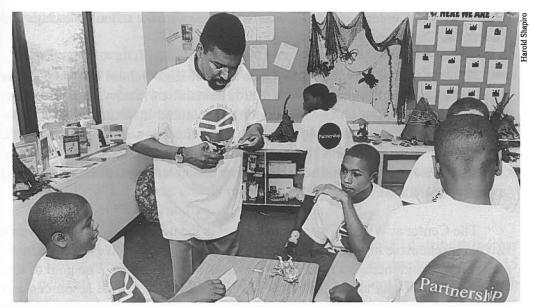
At Davis Street Magnet School, a team curriculum unit on "Exploring Native American and African Culture through Mask-Making" moved into its second phase, dealing with African masks. Their work was showcased at the New Haven Public Library. Extensions of this work on mask-making have now entered an African-American Heritage Language Arts Program and the Davis Community School After School Program. Three second-grade teachers also made use of Institute curriculum units on astronomy when supervising projects for the Citywide Science Fair.

At Edgewood Magnet School, the Center continues to support the use of Institute curriculum units as primary resources for teacher-based research and curriculum writing. A team of 12 teachers has researched online curriculum units to create a new middle school curriculum for Edgewood entitled "What If ... Dual Perspectives on History."

The new Center at East Rock Global Studies Magnet School has been reviewing previous Curriculum Units that fit within its Comprehensive School Plan Goals. It offers Saturday Academies each month that involve parents as

The Centers have caused teachers to scrutinize many of the Curriculum Units that are available for their use.

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A major goal was preparing sixth-grade students to take the Connecticut Mastery Test.

Joseph H. Lewis and students in the Summer Academy at East Rock Global Studies Magnet School.

well as students, including "Traveling Around the World" and an "International Festival." It also mounted a Summer Academy July 19-30, 1999. The staff members included one teacher and two assistant principals. A major goal was preparing sixth-grade students to take the Connecticut Mastery Test. The curriculum, shaped around two topics, Native Americans and the animal kingdom, directly adapted five Institute units written over a period of fifteen years and gained some general material from two others. Students in one group made a concluding trip to the Pequot Museum in Ledyard, CT; students in the other group made such a trip to the American Museum of Natural History in New York City.

At Fair Haven Middle School there were a great number of new teachers this year. The Center held an open house to familiarize the new teachers with the Institute objectives and the ways in which the Center could help them develop their school plans.

At Roberto Clemente Middle School the Center has been used extensively as teachers access the Internet to find information pertaining to Black History Month, Puerto Rican Discovery Day, International Day, and Hispanic Pride Celebration. For 2000 the Center plans to encourage more collaboration among teachers who have not collaborated in the past. There is now an opportunity for teachers to prepare programs and lessons to include all students (Anglo, Hispanic, and African-American). The Center's goal for the year is to have teachers of diverse backgrounds working together.

Career High School, which has consistently made good use of the Center and Institute resources, has just become an inter-district magnet school with dual foci on allied health (medical-related health sciences) and computers and business. It has moved into a new building and will increase its student body over the next three years. The school's principal has relied

heavily on the Center's leadership team to help prepare the school's teachers and students for this transition.

At Cooperative Arts and Humanities Magnet High School the focus of the Center is upon interdisciplinary work in arts, humanities, history, and mathematics. The Multi-Cultural Days during February featured Institute units on Afro-Americans. A mini-grant on African Myths resulted in a 15 minute dramatic video, which is on file at the Teachers Institute and the high school. Hispanic Cultures Week also brought teachers together to emphasize materials contained in the curriculum units.

The Center at Wilbur Cross High School is located in one of New Haven's two comprehensive high schools. Most of the teachers there have not been Institute Fellows, and there is a need for professional development. The goal of this Center for 1999 was to introduce the teaching staff to Institute resources and give them opportunities to research, write, and implement curriculum based on those resources and geared to the interests, abilities, and needs of their students. Members of the Coordinating Team had begun a two-year process of assessing areas where teachers' interests intersect with Institute curriculum units. In November the Center held a school-wide reception to open the Center and make teachers and administrators aware of the resources it contains. The teachers who lead Center activities are beginning to conduct in-service programs for each school department to describe these resources in greater depth and as they pertain to each academic discipline. They report that almost all teachers in the school are now aware of the Center and that at least half have been to the Center.

In December 1999 the Institute announced that, to encourage teachers in schools that have an Institute Center to become more familiar with and to use the Center's curricular resources, it would offer an honorarium of \$150 to those participating in special workshops to be conducted in January and February 2000. The first hour of each workshop would be devoted to Institute resources online, including the use of the Institute Web site and e-mail. The second hour would vary from week to week and would present various uses of Institute resources, from curriculum projects to Academies for students to special projects that may be supported by planning grants and minigrants from the Institute.

This is a crucial time in the "institutionalization" of the Centers within the the Institute's work in New Haven. A grant from the Arthur Vining Davis Foundations in October 1999 will enable the Institute to add a fourth high school Center, thereby making Centers available to the great majority of New Haven's high school teachers. It will also allow the Institute to assist with and document the progress of the high school Centers, and to establish Center work as a regular part of the Institute's core program.

The Centers will now become a prominent feature of the Institute, to be emulated by other university-school partnerships as we embark on the next phase of the National Demonstration Project.

This is a crucial time in the "institutionalization" of the Centers within the Institute's work in New Haven.

Preparation for the Program in 2000

From June through August the Institute identified and approached the 57 teachers who would serve during the 1999-2000 school year as the 15 Representatives and 42 Contacts for their schools. (Sixty teachers had served in these ways during 1998-1999.) 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 Representatives who served in 1998-1999 were widely regarded as effective, we sought a high degree of continuity of Representatives.

In 1998-1999 the Representatives and Contacts were well distributed across New Haven schools with 26 (43 percent) representing elementary schools, 15 (25 percent) representing middle schools, 15 (25 percent) representing high schools, and 4 (7 percent) representing transitional schools. For 1999-2000, there was a rather similar distribution, with 26 (47 percent) representing elementary schools, 7 (10 percent) representing middle schools, 12 (21 percent) representing high schools, and 5 (9 percent) representing transitional schools. Whether or not they had a Representative, all schools had one or more Contacts to serve as a conduit for information to and from the Institute throughout the school year. (Some Contacts served more than one school.) Of the Representatives and Contacts, 18 were Black non-Hispanic, 29 were White, 8 were Hispanic, and one was of another ethnicity. 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 the same functions but are not required to participate in biweekly 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 pro-

The Institute ensures that all teachers may have an effective voice in shaping a program in which they will then have the opportunity to take part.



School Representatives meeting in fall 1999. (Clockwise from front left: Yolanda U. Trapp, Joseph H. Lewis, Eddie B. Rose, Director James R. Vivian, Richard R. MacMahon, Leslie A. Abbatiello, Monique Y. Gisser, Lisa M. Galullo, and Jean E. Sutherland.)

gram of curricular and staff development in which they will then have the opportunity to take part.

The Representatives held their first meeting of the new school year on September 7, 1999, and thereafter met twice monthly with the Director. On September 21, the Institute held a reception for Representatives and Contacts, so that they might become better acquainted with one another and might discuss plans for 1999-2000. That meeting set the stage for another productive year of their work together. 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 elementary, middle, and high schools.

By the end of December the Representatives had decided upon the following seven seminars for 2000: Robert E. Apfel, Robert Higgin Professor of Mechanical Engineering, "Sound and Sensibility: Acoustics in Architecture, Music, and the Environment"; Gary W. Brudvig, Professor of Chemistry, "The Chemistry of Photosynthesis"; Sandra H. Ferdman-Comas, Assistant Professor of Spanish and Portuguese, "Women Writers in Latin America"; Arthur W. Galston, Eaton Professor Emeritus of Botany and of Molecular, Cellular, and Developmental Biology, "Bioethics"; Ian Shapiro, Professor of Political Science, "Crime and Punishment"; Rogers M. Smith, Alfred Cowles Professor of Government, "Constitutional Privacy in the Twenty-first Century"; and Bryan J. Wolf, Professor and Chair of American Studies and Professor of English, "Ethnicity and Dissent in American Literature and Art."

Local Advisory Groups

Steering Committee

The 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:

1. 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; preparation of system-wide curricula drawing on Institute curriculum units; development and use of electronic resources and communications; planning and conduct of after-school, Saturday, and summer Academies for

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

Annual Report: Local Advisory Groups

teaching Institute units to New Haven students; conduct of interdisciplinary or intergrade teamwork in specific schools; and organization and provision of technical assistance to Teacher Institute demonstration sites in other cities

2. Attends and comes prepared to meetings twice monthly and takes professional days when needed to carry out these responsibilities

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

During 1999 the Steering Committee consisted of Peter N. Herndon, Pedro Mendia-Landa, Mary E. Stewart, and Jean E. Sutherland. The Steering Committee operates as teacher leaders for each sphere of Teachers Institute work. It has also assumed responsibility for leadership and assessment of the Centers. It dealt with the documentation of Center use and activity, the relations with the school district and with principals, the awarding of mini-grants and planning grants, the process of renewing Institute Centers and establishing new Centers, the upgrading of computers, and the installation of any table disks and banners needed in the Centers. It considered various topics raised by the 1998 Fellows evaluations, including the new requirement that Fellows hand in the completed curriculum units on disks. It planned the two Forums for the Centers that were held in June and December.

The Steering Committee of 1998 had assisted in planning the January 1999 orientation for those sites awarded Implementation Grants. It had canvassed teachers at the demonstration sites for their seminar choices for the July Intensive and planned for topics to cover in the January Orientation Session and teachers to present those topics. The Steering Committee now provided very important assistance in planning and carrying out the July Intensive for the new Teachers Institutes in the National Demonstration Project. It supervised and carried out with the National Steering Committee the process of application to the National Seminars. It served as contacts with the National Fellows before arrival; and it met with the National Steering Committee in July.

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.



University Advisory Council Executive Committee meeting. (Clockwise from left: Director James R. Vivian, Cynthia E. Russett, Sabatino Sofia, Mary E. Miller, Gary L. Haller, Kent C. Bloomer, and Rogers M. Smith.)

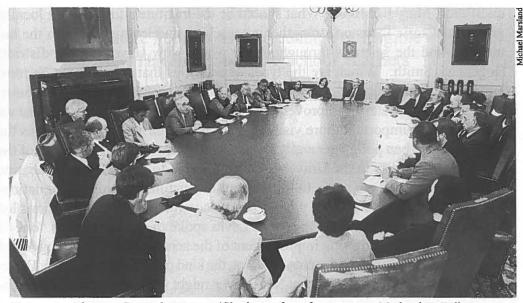
The University Advisory Council meets once each year; the Executive Committee meets twice or more each semester. The co-chairs of the Council meet and communicate frequently with the Director between meetings. Members of the Executive Committee and the Steering Committee meet jointly from time to time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

During 1999 the Executive Committee met in February, March, November (twice), and December. These meetings concerned priorities and plans for the Institute's work locally and nationally. The following issues received most attention: If the National Demonstration Project is successful, what should be the Institute's role in working with other cities? How ambitious should those plans be? What should be the Institute's future work in New Haven, and its place in the university's relationship with this city? How should the Institute plan for a meeting in New Haven of the presidents, chancellors, and superintendents from the demonstration sites, quite possibly in conjunction with a National Advisory Committee meeting? How may continuing funding for work in the sciences be obtained? Acting as the Institute's course-of-study committee, the Executive Committee also approved the seven seminars that would be offered 1999.

On April 29 the full University Advisory Council held its sixth annual meeting with President Levin. Co-chair Jules D. Prown opened the meeting by welcoming the members and announcing that during the coming year Rogers M. Smith would become Co-chair with Sabatino Sofia.

Director James R. Vivian then offered a brief report, in which he emphasized that the Institute has continued at an undiminished level the New Haven program for teachers from throughout the school system, has developed three new Institute Centers in individual New Haven schools, and has assisted in the establishment of Teachers Institutes in four other cities. He noted that short-

Annual Report: Local Advisory Groups



University Advisory Countil meeting. (Clockwise from front center: Michael E. Zeller, Rogers M. Smith, Mary E. Miller, Gary L. Haller, Werner P. Wolf, Jock Reynolds III, Deborah Thomas, Jules D. Prown, James R. Vivian, Bryan J. Wolf, Howard R. Lamar, Gerald Thomas, Traugott Lawler, Sharon M. Oster, Susan Hockfield, Jon Butler, Margot Fassler, Thomas R. Whitaker, Murray J. Biggs, Leon B. Plantinga, Richard C. Levin, Sabatino Sofia, Kurt W. Zilm, Rev. Frederick J. Streets, Sheila de Bretteville, and Cynthia E. Russett.)

term foundation support has made possible the offering of three seminars in the sciences this year and again next year, but that the capacity to offer seminars in the sciences after 2000 remains uncertain. He stated that he continues to believe that the Institute's work in the sciences depends ultimately on securing an endowment adequate to provide the financial stability to the sciences that the endowment for the humanities has guaranteed.

Vivian also noted that the Institute has benefited locally in a number of ways from the National Demonstration Project. The \$2.5 million grant from the DeWitt Wallace-Reader's Digest fund has enabled the Institute to double the size and increase the professional stature and experience of the full-time staff so that it now consists of an Assistant Director, Production Associate, Financial and Database Coordinator, and Administrative Assistant. The Institute has installed a new computer system, and is far into the process of designing a database that integrates all the functions of the Institute in ways that will streamline and simplify its work, and will make possible important research that heretofore would have been more time-consuming than could be afforded. Participating on the planning and implementation teams has provided New Haven teachers professional opportunities they otherwise would not have had, and it has allowed Yale faculty members to talk with colleagues from other sites about educational matters of mutual concern. The Institute's work nationally has helped it to articulate more specifically what it considers to be the essential features of its work in New Haven. And it has led participants, especially teachers in the schools, to a renewed appreciation of the opportunities the Institute provides them here.

The meeting then focused on both the local program and the National Demonstration Project. Members of the Executive Committee to raised a series of The Institute has benefited locally in a number of ways from the National Demonstration Project.

questions: Mary E. Miller: What should be the Institute's future work locally, given its historic focus on strengthening teaching and learning of both the humanities and the sciences throughout the whole New Haven school district? Rogers M. Smith: Which are the types of activities that are likely to be most important to maintain and strengthen, given Yale's concerns for visible contributions but also systemic improvement? How do we make the activities that we regard as most important more visible? Rev. Frederick J. Streets: What is the University's urban policy generally? Cynthia Russett: What is the place of the Institute specifically in the University's relationship to New Haven? Sabatino Sofia: How should we begin to think about the Institute's future work nationally, if the demonstration sites prove to be successful? These presentations led to wide-ranging suggestions. President Levin spoke of the Institute as "one of the principal engines driving improvement of the school system." He suggested that, after the conclusion of the present Grant, the kind of initiative shown by Director Vivian should continue, and that New Haven might well become a national center for the dissemination of the results of university-school partnerships.

In December, 1999, Thomas R. Whitaker and Bryan J. Wolf joined the Executive Committee; Paul Fry and Brigitte Peucker moved from the Executive Committee to the regular Council, and the following members of the faculty were invited to serve on the regular Council: Glenda E. Gilmore, Paul Gilroy, Langdon L. Hammer, Peter Salovey, and Ian Shapiro.

Local Program Documentation and Evaluation

Many evaluations of the Teachers Institute demonstrate that it assists schools in specific ways, and that the results are cumulative. (See especially A Progress Report on Surveys Administered to New Haven Teachers, 1982-1990 [New Haven: Yale-New Haven Teachers Institute, 1992].) In the fall of 1999, the Institute updated its ongoing 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 in teaching in New Haven. It showed that, of the 471 New Haven teachers who have completed the program successfully at least once between 1978 and 1999, more than half (51 percent) are currently teaching in New Haven. An additional 43 (9 percent) have assumed full-time administrative posts in the school system. Thus threefifths (60 percent) of all Fellows since 1978 are currently working in New Haven Public Schools. These statistics are particularly encouraging because of the Institute's determination to involve individuals who will continue to serve students in our urban school district. As we noted earlier, the increasing presence of former Fellows in administrative positions has rendered the Institute more visible and has encouraged other teachers to participate in its program.

As Table 2 shows, a considerable number of current elementary school teachers in New Haven (12 percent) have completed successfully at least one year of the Institute. (Elementary school teachers were first included in 1990.)

President Levin spoke of the Institute as "one of the principal engines driving improvement of the school system."

Annual Report: Local Program Documentation and Evaluation

Table 2

Institute Fellows as a Percentage of Eligible New Haven *Elementary* School Teachers

	Kindergarten	9%
	Grade 1	9%
	Grade 2	7%
	Grade 3	9%
	Grade 4	9%
	Grade 5	21%
	Total K - 5*	12%
T	ncludes non-graded arts and sne	cial education teachers

*Includes non-graded arts and special education teachers and librarians and curriculum coordinators.

As Table 3 shows, 33 percent of New Haven high school teachers of subjects in the humanities and sciences, 33 percent of transitional school teachers, and 30 percent of middle school teachers have also done so. A number of teachers have participated for two to twenty years. Of those Fellows still teaching in New Haven 35 percent have participated in the Institute once, 33 percent either two or three times, and 32 percent between four and twelve times. On the other hand, of those Institute Fellows who have left the New Haven school system, 56 per-

Table 3

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

	Middle Schools	High Schools	Transitional Centers	Overall
English	43%	35%	0%	37%
History	41%	28%	17%	30%
Languages	12%	21%	0%	16%
Arts	35%	29%	0%	31%
Math	15%	25%	50%	23%
Science	28%	30%	67%	31%
Grade 5*	0%	n/a	n/a	0%
Grade 6	21%	n/a	n/a	21%
Grade 7	17%	n/a	n/a	17%
Grade 8	29%	n/a	n/a	29%
Total**	30%	33%	33%	35%

*Grade 5 teachers are included here only for middle schools; grade 5 teachers in elementary schools are reported in Table 2.

**Includes teachers of interdisciplinary and other subjects.

n/a = not applicable

cent completed the program only once, and 30 percent took part two or three times. Only twenty-three Fellows who have left (13 percent) completed the program four or more times. Thus the Institute's cumulative influence in the New Haven school system and its likely effects upon retaining teachers are indicated by the fact that it has worked in the most sustained way with those who have chosen to remain in teaching in the New Haven Public Schools.

In 1996 members of the National Advisory Committee 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 Academies, and the development of electronic resources. This documentation has been summarized in earlier sections of this report.

NATIONAL ADVISORY COMMITTEE

A National Advisory Committee, composed of Americans distinguished in the fields of education, private philanthropy, and public policy, assists the Teachers Institute with the dissemination, evaluation, and development of both the program in New Haven and the National Demonstration Project. New members are invited to serve, from time to time, by the President of Yale University. In 1999 two people accepted membership on the Committee: Mary Lee Fitzgerald, Program Officer, DeWitt Wallace-Reader's Digest Fund; and David L. Warren, President, National Association of Independent Colleges and Universities. In advance of National Advisory Committee meetings, members of the University Advisory Council and the Steering Committee meet separately and together to discuss program development and evaluation, national dissemination, and finance. On each of these and any other timely topics they prepare papers that are circulated to brief the Committee before the meetings.

As the Teachers Institute plays a leading role in the national movement for university-school partnerships the National Advisory Committee assists in determining how to make the most effective contribution to institutions and schools in other communities. The Committee provides a variety of perspectives that aid in examining what each constituency for such partnerships would regard as the best evidence of their effectiveness.

The Committee last met on March 6, 1998. It then provided advice on the Institute's new ways of working in New Haven schools and on the National Demonstration Project that has been designed to show that the Institute's approach in New Haven can be adapted to establish similar university-school partnerships under different circumstances in other cities. The Committee will next



1998 National Advisory Committee meeting. (Left to right: Richard Ekman, Gordon M. Ambach, Sabatino Sofia, Glegg L. Watson, and I. Michael Heyman.)

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meet in the fall of 2000, at which time it will consider the ongoing process and the results thus far of the National Demonstration Project. Its meeting will therefore be scheduled to occur shortly after the Second Annual Conference of the National Demonstration Conference, and in conjunction with a meeting of the presidents, chancellors, and superintendents from the five collaborating Teachers Institutes.

THE NATIONAL DEMONSTRATION PROJECT

Aims, Scope, and Planning

The National Demonstration Project, supported by a four-year grant of \$2.5 million from the DeWitt Wallace-Reader's Digest Fund, aims to demonstrate the feasibility of adaptations of the Institute approach at several other sites. It directs its attention to sites where school systems serve a significant number of students from low-income communities, but where the pattern and magnitude of needs and resources are different from those that obtain in New Haven, and where significant opportunities exist, without varying from our approach, for devising local strategies in meeting those needs. From March 1998 through January 1999, in accordance with its proposal to the DeWitt Wallace-Reader's Digest Fund, the Teachers Institute had:

• Invited fourteen sites to submit proposals for 8-month Planning Grants

• Provided to those sites initial information concerning the Institute's policies and procedures

• Supervised the awarding of Planning Grants on recommendation of a National Panel to five of the seven applicants

• Provided for the sites that received Planning Grants a "July Intensive" that enabled a practical immersion in the processes of the Institute

• Awarded 3-year Implementation Grants, on recommendation of a National Panel and on the advice of the program officer of the DeWitt Wallace-Reader's Digest Fund, and after further negotiations with certain sites, to four applicants: Chatham College, Carnegie Mellon University, and the Pittsburgh Public Schools; the University of Houston and the Houston Independent School District; the University of New Mexico and the Albuquerque Public Schools; and the University of California at Irvine and the Santa Ana Unified School District

• And begun to work with the Grantees on their plans for the coming years

The award to four applicants, instead of the three originally envisioned in the proposal to the DeWitt Wallace-Reader's Digest Fund, was made possible in part by a supplementary grant of \$150,000 by the McCune Charitable Founda-

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tion. The National Panel concluded that all four sites had distinct advantages as demonstration sites, though some concerns about budget and organizational structure remained to be resolved. An array of four sites would give the National Demonstration Project a greater diversity of institutional type, urban scope, and organizational strategy. It would establish a larger base for collaboration among the demonstration sites. In case of some insurmountable difficulty at any one site, it would provide a firmer guarantee of three demonstration sites reaching a successful conclusion. And if all four sites were successful, it would provide an excellent coast-to-coast nucleus for further expansion of the group of Teachers Institutes thereby established.

The four sites represent quite different urban challenges. All have school systems considerably larger than that of New Haven, and all must deal with serious problems associated with low-income communities and a high proportion of racial and ethnic diversity. But they also illustrate different institutional configurations and different strategies in approaching those problems.

The Roles of the Yale-New Haven Teachers Institute

For the duration of the Grant from the Fund, the Yale-New Haven Teachers Institute will have a dual relationship to the four other Teachers Institutes. It is both monitor of the Re-Grants to the four sites and a senior colleague of those Institutes. It is responsible for offering technical assistance to the other Teachers Institutes, for convening in 1999 the January Orientation Session and the July Intensive Session, and for convening in 1999, 2000, and 2001 the Annual Conferences in October. It also maintains the National Steering Committee and the National University Advisory Council, sponsors the national periodical On Common Ground, and helps in other ways to further the aims of the entire league of Teachers Institutes and to disseminate their accomplishments. It is responsible for conducting site visits each year to offer assistance and to gain information about the progress of each new Institute. At the same time, it encourages each of the other Teachers Institutes to develop both a necessary independence and a collaborative spirit. Its aim is to assist in transforming the group of five Teachers Institutes into a fully collaborative league that might in the future extend its membership to include Institutes at yet other sites.

This multiplicity of roles has required a continuing reassessment of this Institute's appropriate emphases. During the planning phase of the Grant, we had been mainly providing information and experience that might enable the demonstration sites to apprehend and internalize the basic principles of this Institute. By the time of the January Orientation in 1999, it seemed that the four demonstration sites had clearly begun to internalize those principles and to discover their own collaborative relationships. During the July Intensive Session, the plenary meetings were held about a pentagonal table in order to signal the fundamental equality of the five collaborating sites. We planned the First Annual Conference as an occasion for the demonstration sites to step forward with their own best accomplishments and experiences, while we stepped back somewhat to the position of observers. There have now been calls for more equal

The Institute is both monitor of the Re-Grants to the four sites and a senior colleague of those Institutes.

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The plenary meetings were held about a pentagonal table.

July Intensive Plenary Session. (Clockwise from left: Peter N. Herndon, Director James R. Vivian, Thomas R. Whitaker, and Jean E. Sutherland, New Haven; Jennifer D. Murphy, Aaron B. Chávez, Wanda Martin, and Douglas Earick, Albuquerque; John Groch, Helen S. Faison, Verna Arnold, and Margaret M. McMackin, Pittsburgh; Timeri K. Tolnay, Barbara Kuhn Al-Bayati, and Mel E. Sanchez, Irvine; Daniel Addis, Joy Teague, William J. Pisciella, Paul Cooke, and Ninfa A. Sepúlveda, Houston.)

participation of all five sites in the Second Annual Conference, and we are continuing to work in that direction.

During 1999 the Implementation Team of Yale faculty members and New Haven Teachers assisted with planning, carrying out, and assessing the site visits to the four new Institutes. As was the case with regard to the site visits in the Planning Phase of the Grant, a Protocol was established to guide the members of the Implementation Team, and this Protocol was discussed at a meeting of the team. (For members of the Implementation Team, see Appendix.) Supplementary Protocols were also designed to highlight the issues specific to each site that had been signaled by the National Panel's review and embodied in the contract, or had emerged in the course of monitoring by Institute staff and members of the Implementation Team. The visit to Albuquerque was made on September 23-24 by Thomas R. Whitaker, Rogers M. Smith (Yale faculty member), and Mary E. Stewart (New Haven teacher). That to Pittsburgh was made on September 27-28 by Director Vivian, Frederick J. Streets (Yale faculty), and Carolyn N. Kinder (New Haven assistant principal). That to Houston was made on October 7-8 by Vivian, Sabatino Sofia (Yale faculty member), and Peter N. Herndon (New Haven teacher). And the visit to Irvine-Santa Ana was made on October 14-15 by Vivian, Thomas R. Whitaker, and Jean E. Sutherland (a New Haven teacher).

The Common Work of the Five Teachers Institutes

The January Orientation Session: On January 8-9, 1999, an Orientation Session was held in New Haven for teams from each site, including the director, university faculty, and school teachers. The purpose of the session was to hear directly the plans made by the sites for the Institutes they had begun to create and



The Orientation Session held in January 1999 for the four sites awarded Implementation Grants. (Clockwise around table: Lawrence Curry and Paul Cooke, Houston; Verna Arnold, Helen S. Faison, and John Groch, Pittsburgh; Thomas R. Whitaker, James R. Vivian, Traugott Lawler, and Pedro Mendia, New Haven; Sharon W. Saxton, Santa Ana; Barbara Kuhn Al-Bayati and Thelma W. Foote, Irvine; William Monroe, Houston; and Colston Chandler, Albuquerque. Back row: Stephen P. Broker and Rogers M. Smith, New Haven; Susan C. Leonard, Les McFadden, Aaron B. Chávez, and Laura Cameron, Albuquerque; John Kadash and Hannah McCarthy, Pittsburgh; and Joseph A. Montagna, New Haven.)

to begin to provide as much practical assistance as possible in the ongoing development of those plans. As Director Vivian said, "In effect, we also inaugurate today a league of Teachers Institutes stretching from coast to coast, united in a common purpose, and driven by the concern we share for strengthening teaching and learning of the humanities and the sciences in the nation's urban public schools." During the Orientation Session the Directors spoke about the scope and strategy their site had adopted and what their Institute intends to demonstrate. A school teacher and a college or university faculty member from each site spoke about the roles that teachers and faculty have played, and will be playing. Caucuses of teachers and faculty members met with some of their New Haven counterparts, while the Directors met with Vivian, Patricia Lydon, and Thomas Whitaker. Meetings were also held to organize the National Steering Committee and the National University Advisory Council.

Planning was begun at this time for the second July Intensive Session. It was decided that each site would determine what would be the appropriate proportion of teachers who had participated in 1998 and teachers new to the Institute process. Plans were made for participation in the admissions process, which would take place much further in advance than for the Intensive Session of July 1998, in order to make possible sufficient advance reading by the participants. Proposals for National Seminars (determined after urging the sites to canvas those teachers who seemed most likely to take part in this year's Intensive Session) were therefore presented initially in this January Orientation Session, and seminar materials were to be sent out at least two months in advance. Teachers at each site were to make their choices of applicants by April 15. Members of

"We are united in a common purpose and driven by the concern we share for the nation's urban public schools." —James R. Vivian

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the New Haven Steering Committee would be joined by Steering Committee members from the other sites in making the final allocations to the seminars. At least one and no more than two teachers from each site would join each of the four seminars. Proposals for National Seminars presented at this time were: Mary E. Miller, "Art and Identity in Mexico, from the Olmec to Modern Times"; Rogers M. Smith, "Immigration and American Life"; John P. Wargo, "Human-Environment Relations"; and Thomas R. Whitaker, "Writing from Several Cultures."

There was also a plenary session for discussion of technical assistance to be provided by the Yale-New Haven Teachers Institute. It focused on the application and admissions process and the seminar and curriculum unit writing process of the Institute. These topics continued to require explanation in the course of this year, in large part because the National Demonstration Project is very different from the professional development or outreach programs to which faculty and teachers have become accustomed.

In another session the entire group discussed the documentation and evaluation of our work together over the next three years and the nature of the Fundcommissioned evaluation to be proceeding concurrently. After a review of the expectations and procedures for the internal evaluation, which includes reporting by each site as specified in the Request for Proposals and in their contracts, Ed Pauly and Ian Beckford from the DeWitt Wallace-Reader's Digest Fund set forth the purposes of the external evaluation, its intended cooperation with the self-studies and reports from the sites, and its desired national impact. Ian Beckford then elicited from the group informal statements of what they hoped to accomplish in the coming three years at each site. The Directors of each Institute also met individually with Director Vivian, Patricia Lydon, and Thomas Whitaker, to discuss the comments made during and after the review by the National Panel and any continuing problems at each site.

A concluding roundtable discussion elicited very favorable comments on this January Orientation and appreciation of the fact that there was now evident an actual face-to-face community of Institutes, working toward the improvement of education in this nation.

The Faculty Forum: In May 1999, as a result of discussions in the National University Advisory Council, the Yale-New Haven Teachers Institute established a moderated electronic forum for the exchange of views and information by college and university faculty members involved in the National Demonstration Project. The Teachers Institute Faculty Forum (TIFF) may be addressed at tiff@yale.edu. The moderator is Professor Jules D. Prown of Yale University. During the late spring, TIFF handled a number of messages from faculty members at the new Teachers Institutes who sought advice about procedures for leading a seminar and supervising curriculum units. Because very little traffic developed, however, the continuance of TIFF became a topic for faculty discussion during the July Intensive Session and the First Annual Conference.

The National Demonstration Project is very different from the professional development or outreach programs to which faculty and teachers have become accustomed.

Past Institute seminar leaders discussed what would be the most useful issues that might be posted electronically in the hope of stimulating further discussion.



Seminar Leaders' Meeting on TIFF. (Clockwise from left: Sandra H. Ferdman-Comas, Thomas R. Whitaker, James R. Vivian, Jules D. Prown, Bryan J. Wolf, Robert G. Wheeler, Robert Wyman, and J. Michael McBride.)

In response to a suggestion made during the Annual Conference, a meeting was held on December 13 of a diverse group of past Institute seminar leaders in New Haven. They discussed what would be, in the light of their practical experience, the most useful issues, framed with questions and some individual solutions, that might be posted electronically in the hope of stimulating further discussion on TIFF. The seminar leaders suggested a dozen or so categories of issues that ran a gamut from vetting seminar applications, dealing with the apparently unprepared Fellow, and the seminar leaders' work with Coordinators, through problems of seminar practice, collegiality, breaking out of the lecture format, use of the Internet, use of the library, visiting classrooms, and the writing of curriculum units, on to ways of dealing with curriculum units that threaten to be unsatisfactory. It was agreed that Jules Prown would organize a list, putting it in the sequence in which such issues might arise in the course of a site's work. The list would then be posted in installments at appropriate times in the course of the coming year. We would hope eventually to prepare a list of frequently asked questions for a password-protected area of our Web site.

The Second July Intensive Session: On March 2, Director Vivian wrote to provide the sites with additional information on the plans for the Intensive Session to be held on July 6-14 and to request their further suggestions. Each site team would include six teachers from the target schools who are current participants in the site's own seminars (at least one or two of whom should have attended both the 1998 Intensive Session and the 1999 January Orientation). Each team would also include three current or future seminar leaders who are key faculty participants in the site's work. As in July 1998, the program for the teachers would include seminars and curriculum-unit development, but there would be no written work for faculty members or directors. There would be ancillary meetings for site representatives to compare their experiences in organizing and conducting a Teachers Institute. Other sessions—devoted to fund

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raising, financial management, university-school relations, and other topics would be arranged according to the requests of participants.

Each teacher would therefore participate in a National Seminar, attend a workshop on writing a curriculum unit, observe two local seminars, and meet with New Haven teachers, members of the Yale-New Haven Implementation Team, and staff of the Yale-New Haven Teachers Institute. Each new Teachers Institute would designate one of its teachers to be a Coordinator in a National Seminar; each Coordinator would also meet with other Coordinators, with James Vivian, New Haven Coordinators, and the Directors of the four new Teachers Institutes. The faculty members would each observe three National Seminars and a local seminar, attend the workshop on writing curriculum units, and meet with each other and with the National Seminar Leaders, Yale faculty members, and staff of the Yale-New Haven Teachers Institute. It was decided, in consultation with the faculty members, that they would not remain through the last three days of the Session. Each Director would observe two local seminars, attend the workshops on writing a curriculum unit, observe Coordinators' meetings, and meet with James Vivian, members of the Yale-New Haven Implementation Team, and staff of the Yale-New Haven Teachers Institute. There would be talks by the four national seminar leaders, periodic team meetings, a meeting of the National Steering Committee, and a meeting of the National University Advisory Council.

In mid-April, the members of the National Steering Committee worked with the New Haven Steering Committee to review the applications of the teachers who would participate in the national seminars. Each of the four members of our Steering Committee worked with a member of the National Steering Committee, working first site by site and then seminar by seminar (as if they were Coordinators conducting a review of the applications). Then, as in 1998, these members of the New Haven Steering Committee made calls to the teachers who had been admitted into the national seminars. After this review, the Leaders of the national seminars wrote the Fellows who had been admitted to provide them with suggested readings and schedules for the seminars. Vivian also wrote each visiting Fellow to provide information on the seminar process, the writing of curriculum units, and the library and computer facilities being made available.

At the outset of the Intensive Session, the Directors of the four new Teachers Institutes offered summaries of the accomplishments and the continuing issues at each site, and the leaders of the national seminars were introduced. In meetings with faculty members, teachers, and Directors, the main problems anticipated or being encountered by those groups were considered. The National UniversityAdvisory Council discussed the present status of TIFF. Faculty members discussed how the compressed schedules in certain sites were working, and how to deal with curriculum units that appeared unsatisfactory. Many of them found their observation of the "collegiality" in both the national seminars and the local seminars to be helpful in clarifying the Institute approach. The teachers made clear that they would like a firmer role in the Annual Conference in October, and that they needed to understand more fully the roles of Representatives and Coordinators.

Faculty members found their observation of the "collegiality" in seminars to be helpful in clarifying the Institute approach.



Pittsburgh Director Helen S. Faison at the July Intensive Opening Session.

Patricia Lydon continued her work with the Directors on grant management, budgets, and financial reports. James Vivian met with the Directors both individually and as a group on a variety of administrative issues and began to plan site visits. He, Patricia Lydon, and Thomas Whitaker met with each site team individually to hear comments on the current accomplishments and challenges, and offer suggestions if asked to do so. At the end of this Intensive Session, the Directors gave summary reports on their deliberations during the Session, their present concerns, and their plans for the coming year.

At this plenary meeting, several decisions about the First Annual Conference were also made. Each site would select one delegate to a planning committee for the conference; those four persons would consult widely with others at their sites, confer with each other, and provide James Vivian with recommendations. (The members of the planning committee, as later selected, were: Verna Arnold, Pittsburgh; Ninfa A. Sepúlveda, Houston; Doug Earick, Albuquerque; and Heidi R. Cooley, Santa Ana.) Vivian would then circulate those recommendations to the National Steering Committee, the National University Advisory Council, and the Directors of the four Institutes for comments. It was Vivian's view, shared by most others present, that the conference should address the exemplary practices and plans of the sites, as well as "whatever issues have arisen locally in our common work."

The visiting Fellows in the national seminars were generally enthusiastic about their seminars, and they clearly appreciated the advance planning for them and the opportunity to think about the reading and their curriculum units before arriving in New Haven. There was, therefore, much less anxiety about completing the work than there had been in July 1998. As was evident in the responses to the Teachers Institute's questionnaires, there was much greater satisfaction with housing conditions and the availability of library, computer, and printing resources. The Yale-New Haven Teachers Institute had been able to arrange

The visiting Fellows were generally enthusiastic about their seminars, and they clearly appreciated the advance planning.



The national seminar on "Writing from Several Cultures." (Clockwise from left: Natalie Martinez and Daniel Addis, Houston; Lorraine B. Martinez, Albuquerque; Timeri K. Tolnay, Santa Ana; seminar leader Thomas R. Whitaker; Aaron B. Chávez, Albuquerque; and Margaret M. McMackin, Pittsburgh.)

substantial improvements in all these areas. Those participating especially appreciated the presence now of the computer assistant who devoted much time to working with those who were preparing drafts of curriculum units. Teachers described their experience as "highly informative," "stimulating," "fantastic." They expressed "gratitude for the very friendly atmosphere" of the seminars. And they commented on their gain of understanding of the process of writing a curriculum unit, and on how those units, though reaching only the first-draft stage here, would contribute to their classroom teaching. A number of teachers hoped that the summer component in the National Demonstration Project could continue, perhaps in some different format or at different sites.

The four Yale faculty members who served as leaders of the national seminars thought them generally to be successful. One seminar leader, who found the national seminar less satisfactory than a local seminar in New Haven, said that the absence of elementary teachers was a disadvantage. In the New Haven seminar "we learned the most, both in substance and pedagogic style, from the art teachers, the music teacher, and the elementary teachers. Their adaptations were simply more imaginative." This seminar leader also said, "although I thought most Fellows performed remarkably, I also thought we just did not have enough time to come up to speed regarding the subject before turning to the lesson plans."

Another seminar leader said, however, that

from the prospectus to the first draft, every unit grew extensively in length and became far more clearly conceived, fully worked out, and more richly detailed and documented. I was amazed they all did so much in such a short and busy period. Overall, it is extremely satisfying to work with such motivated people who bring such a range of pertinent experiences, knowledge, and insights to discussions. They commented on their gain of understanding of the process of writing a curriculum unit.



The national seminar on "Immigration and American Life." (Clockwise from left: Sharon W. Saxton and Heidi R. Cooley, Santa Ana; Susan C. Leonard, Albuquerque; seminar leader Rogers M. Smith; Ninfa A. Sepúlveda, Houston; Michele R. McClendon, Pittsburgh; and Joy Teague, Houston.)

This seminar leader concluded:

I found the experience of offering national seminars the last two years so satisfying, and the response from teachers so positive, that I believe we should begin exploring how the widespread desire to repeat this experience in the future can be met.

Collegiality within and across the sites was an important feature of this July Intensive. A teacher expressed appreciation for being able to work with another teacher from her team, learning how to share lessons. A faculty member, while finding the sharing of experience about writing curriculum units to be "invaluable," also confessed to being "as interested, if not more, in the experiences, procedures, and practices" at the other sites as he was in those in New Haven. A Director noted that conversation with Coordinators from New Haven and the other sites "was useful, giving us grounds for comparing our Fellows' problems with those of others and offering some concrete ways of addressing issues." This Director also noted that conversations with Directors from other sites "helped me to understand which challenges we have in common and which are unique to a site. We shared ideas for solving problems, heading off problems, and creating opportunities for our respective Institutes."

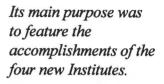
Questions remained in the minds of some teachers, faculty members, and Directors: about teacher leadership, seminar planning, curriculum-unit writing, the role of Coordinators, and indeed the sixteen Basic Principles that are part of each contract and that are now printed as an appendix to the Brochure for the project. In a meeting of the Implementation Team in New Haven on July 16, these issues and others were discussed as bases for shaping the site visits (which have been described above) and the First Annual Conference. Nonetheless, the overall impression of the Implementation Team was that, as one put it, "we now

"I believe we should begin exploring how the widespread desire to repeat this experience in the future can be met." —Seminar Leader

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have in each of the sites a core of teachers and faculty and some administrators that seem knowledgeable and excited about the Project." It was hoped that the Annual Conference might move yet further in providing mutual education among the new Institutes themselves, and a yet fuller demonstration of collaboration within and across the sites.

The First Annual Conference: The First Annual Conference was held in New Haven on October 22-23. Its main purpose was to feature the accomplishments of the four new Institutes. There were panels and roundtable discussions on "The 1999 Seminars and Curriculum Units," "Disseminating Curriculum Units and Promoting Institutes Locally," "Teacher Leadership in the Institutes and in Schools," and on the second day, a panel discussion on "Results for Students." The first two panels offered clear indications of the work being done in certain seminars and of the vigorous attempts by some teachers and Directors to promote their Institutes. Some participants felt that the panel on "Teacher Leadership" needed to go yet further to engage with specificity the problems and achievements in establishing groups of Teacher Representatives. The panel on "Results for Students," a topic of great interest, dealt very largely with procedures that are explicitly excluded from the present Grant. There was some vigorous argument about methods of assessing student results, and a general opposition to the insistence upon standardized tests and a preference for evaluations that may test the ability to think and write creatively.





Panel Discussion at the First Annual Conference in New Haven, October 1999. (From left: Aaron B. Chávez, Albuquerque; William J. Pisciella, Houston; Verna Arnold and Margaret M. McMackin, Pittsburgh; and Sharon W. Saxton, Santa Ana.)

The concluding portion of the program dealt with "The External Evaluation of the National Demonstration Project." Ian Beckford and Bruce Haslam presented the plans for the evaluation as intended by Policy Studies Associates, which has been commissioned by the DeWitt Wallace-Reader's Digest Fund to carry out this task. In doing so, Haslam noted that he had been struck during the conference by the amount of institutional learning that is already occurring. He emphasized that the Interim Reports in 2000 and 2001 would not evaluate

individual projects or summarize progress on a site by site basis. The Final Report in 2002 would include specific case studies only as appendices. During the following discussion, some questions were raised by teachers and faculty members about whether the evaluation would sufficiently focus upon the Demonstration Project's collaborative dimensions and its intent to assist and energize teachers in ways that go well beyond the standards that are prescribed by district mandates.

A meeting of the National Steering Committee brought forth many suggestions, most importantly that a newsletter be established for the National Demonstration Project. Thus far we have received contributions for the newsletter from two of the new Institutes. The final afternoon was kept open for individual meetings with Directors or site teams and persons from Policy Studies Associates.

It was clearer yet from the Annual Conference that the teams from the four new Institutes are in the process of working out genuine collaboration in many ways, through formal and informal meetings and other communications. They seemed to welcome the shift of emphasis on this occasion, as the Yale-New Haven Teachers Institute retired somewhat in the background as observers, and delegates from the new sites had the opportunity for more direct sharing. They looked forward to a Second Annual Conference in 2000, and several team-members also expressed the hope that the national seminars in the July Intensive Session might also be continued in some fashion.

Of the Conference as a whole, one Director said: "I found all the panel discussions involving members from the demonstration sites to be very useful. This has generally been the case any time the sites have been brought together to share information and experiences, and I would welcome the opportunity to do this more frequently." There were a few expressions of disappointment. A Director commented on the panel on "Teacher Leader-ship": "Presentations drifted into testimonial too quickly for my taste. We *know* teacher leadership is a good thing. The questions are: How do we develop it? What are the impediments?" In general, however, those attending the Conference found it a success. One teacher said:

The overview of the seminars and the examples of the curricular units from different sites was inspiring. It was reassuring to see that all of the sites seem to face similar challenges. The format of having a panel discussion after each site's separate presentation was particularly helpful. There was always a lively and open exchange of ideas and comments.

Another teacher said: "Your conference was a total class act. I gained knowledge, insight, renewal, and a sense of hope for my profession." A faculty member said: "Each meeting with Yale faculty and other faculty has helped immeasurably, particularly with the 'nuts and bolts' of the process of a seminar."

"The overview of the seminars and the examples of the curricular units from different sites was inspiring." —Fellow from a site

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Another faculty member, new to the Demonstration Project, wrote at length in praise of "the organization of the conference as a fully teacher-centered enterprise." He said:

The two days were driven by a genuine interest in dialogue that cuts across all potential lines of division (geographical, institutional, professional, disciplinary). The question-andanswer periods were among the liveliest and most respectful I have encountered. I enjoyed the "creative tensions" that arise in a national project that must (and does) juggle an overall vision or organization along with the particularities of local sites. At no point were problems ever considered insurmountable; and at no point were the differences among sites . . . swept under the rug. . . . Perhaps all these positive experiences can be summed up in the commitment that I saw demonstrated at the conference to maintaining and working through ambivalences arising from often opposing goals rather than dropping one side or the other for the sake of expediency.

Several participants expressed the hope that next year's Annual Conference might take place at one of the other sites, and that the Yale-New Haven Teachers Institute would now take a more obviously active part. One faculty member said: "I'd like to see the Yale participants be more fully integrated. I understand and appreciate holding them back for the Year 1 Conference, but for Year 2 they can bring some sense of history and commonality to the proceedings." Because the purpose of this Conference was to feature the demonstration sites, we did not participate directly in any of the panels. It may be appropriate, however, for us to plan to engage more fully and visibly in the future Conferences.

The Work of the Four New Teachers Institutes

Throughout the year the Yale-New Haven Teachers Institute has been working with the four new Institutes in a variety of ways. Patricia Lydon, Liaison to the sites, has been frequently monitoring and advising on budgetary and organizational matters by telephone, e-mail, correspondence, and direct conversations in meetings. Director Vivian has been responsive to many questions and difficulties of a more wide-ranging character that have been raised by the sites. Contacts have been established between teachers and faculty members on the Implementation Team with their counterparts at various sites. Site visits have provided first-hand information from a variety of people, university and school administrators as well as teachers and faculty members. And the annual narrative and financial reports submitted by four new Institutes have set forth their challenges and accomplishments during this first year of implementing the National Demonstration Project. In its second Annual Report to the DeWitt Wallace-Reader's Digest Fund, the Yale-New Haven Teachers Institute has described its monitoring and technical assistance in considerable detail. Here we offer a condensed account of the experiences of the new Institutes.

"The two days were driven by a genuine interest in dialogue that cuts across all potential lines of division (geographical, institutional, professional, disciplinary)."

Seminar Leader from a site

Pittsburgh Teachers Institute: This Institute brings the resources of Chatham College and Carnegie Mellon University to a selected portion of a school district with 93 schools serving 41,000 students. Both institutions have previously worked with the schools, but this is the first occasion when the two institutions have collaborated on a project in partnership with the schools. The Pittsburgh Teachers Institute works with 20 elementary, middle, and high schools, representing the three regions of the district, which have volunteered to take part. Helen Faison, an experienced teacher and school administrator within the Pittsburgh Public Schools and former chair of the Education Department at Chatham College, serves as Director. Her work has clearly earned her the esteem of the teachers union and major funders in the Pittsburgh area. She is well suited to be at the center of a complex community endeavor. Barbara Lazarus, Vice-Provost at Carnegie Mellon, and Anne Steele, Vice-President at Chatham, assist Faison in matters relating to those two institutions.

On June 29, President Esther L. Barazzone of Chatham College and President Jared L. Cohon of Carnegie Mellon University requested that Helen Faison be relieved of the directorship until June 2000 in order to assume the position of interim-Superintendent of Schools in Pittsburgh. They recommended that during her absence John Groch, Assistant Professor of Communications at Chatham College, serve as Acting Director. Director Vivian approved this appointment, with the understanding that Groch would be relieved of all other duties for the period of time when he is Acting Institute Director. Presidents Jared Cohon and Esther Barazzone have also indicated their willingness to constitute a University Advisory Council that includes senior faculty from both campuses. In New Haven we have found such a University Advisory Council, which can assist with advocacy, continuity, and development, an essential piece in involving senior faculty and recruiting faculty to become leaders.

In 1999 the Pittsburgh Teachers Institute offered four seminars for 32 teachers (26 of whom completed curriculum units): "Newspapers: Yesterday, Today,



Pittsburgh Teachers Institute team meeting in New Haven, July 1999. (Clockwise from left: Verna Arnold, Carol M. Petett, Patricia Y. Gordon, Margaret M. McMackin, Helen S. Faison, James Davidson, Elizabeth Roark, and John Groch.)

This is the first occasion when the two institutions have collaborated on a project in partnership with the schools.

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and Tomorrow" (James Davidson, Adjunct Professor of English, Carnegie Mellon University); "American Culture in the 1950s" (John Groch, Assistant Professor of Communication, Chatham College); "Physics, Energy, and Environmental Issues" (Richard Holman, Professor of Physics, Carnegie Mellon University); and "Multicultural Literature: French African and Creole Writers" (Janet Walker, Professor of French and Chair, Department of Modern Languages, Chatham College). The curriculum units have been printed, distributed, and made available on the Institute's Web site.

School Representatives from the 12 largest schools served by the Pittsburgh Teachers Institute had been convened as an Implementation Committee to supervise the planning of seminars and the applications process. A Fellow from each seminar was selected to serve as a coordinator, responsible, along with the Institute's Director, for reviewing the curriculum unit to ensure its adherence to the academic standards and core curriculum of the Pittsburgh Public Schools. At each step of the process, units were submitted to seminar coordinators, who reviewed them to be sure that they specifically addressed at least some of the School District's 62 standards for Communication, World Languages, Family and Consumer Sciences, Mathematics, and/or Arts and Humanities.

For 2000, seven seminars are planned: "Pittsburgh Writers," James Davidson (English, Carnegie Mellon University); "Interdisciplinary Approaches to Pittsburgh History" (Steffi Domike, Art, Chatham College); "From Eureka to Newton's Apple: Scientific though from Ancient Greece to the Renaissance" (John Hagen, Chemistry, Chatham College); "Learning Physics through Science Fiction" (Richard Holman, Physics, Carnegie Mellon University); "American History through Art" (Elisabeth Roark, Art, Chatham College); "Proof in Mathematics: Origin, Practice, Crisis" (Juan Jorge Schäffer, Mathematical Sciences, Carnegie Mellon University); and "Religion in American Society" (Janet Stocks, History, Carnegie Mellon University). The Institute's seminar schedule is closely modeled on that in New Haven.

The Pittsburgh Teachers Institute has the support of the highest administrators in both Chatham College and Carnegie Mellon University, as well as the administration of the Pittsburgh Public Schools. It has attracted much favorable publicity within the city and seems in a very good position with regard to fundraising. The Grable Foundation has awarded a grant of \$140,000; the Hillman Foundation a grant of \$60,000; and the Henry C. Frick Educational Fund of the Buhl Foundation a grant of \$60,000.

Houston Teachers Institute: In the fourth largest city in the United States, the Houston Teachers Institute brings the resources of the University of Houston to the Houston Independent School District, where 280 schools serve 212,000 students. The University is a state-supported research and teaching institution that draws most of its students from the Greater Houston area. The Institute works with 20 self-selected middle and high schools enrolling 31,300 students to establish a program that will address the needs of an ethnically mixed student-body, a large proportion of whom are non-English speaking. Paul Cooke, who

The Pittsburgh Teachers Institute has attracted much favorable publicity and seems in a very good position with regard to fund-raising.

has been a Visiting Assistant Professor of Political Science, serves as Director. He has tried to model the Houston program very closely on that in New Haven and has sought frequent contact and assistance from the Yale-New Haven Teachers Institute.

In 1999 the Institute offered six seminars for 75 teachers (60 of whom completed curriculum units): "Symmetry, Patterns, and Designs" (Michael Field, Professor of Mathematics); "Hollywood Distortions of History" (Garth Jowett, Professor of Communication); "The United States in the 1960s" (Lawrence Curry, Assistant Professor of History and Associate Dean); "Technology and the Discipline of Chemistry" (Simon G. Bott, Research Associate Professor of Chemistry); "The History, Economic Base, and Politics of Houston" (Richard Murray, Professor of Political Science); and "Addressing Evil" (Cynthia A. Freeland, Professor of Philosophy).

The Houston Teachers Institute now has a vigorous group of teacher leaders. Its Teacher Representatives have been meeting regularly to carry forward the work of the Institute. The week-to-week business of the seminar program has been monitored by the Coordinators Committee.

President Arthur Smith has also expressed interest in naming faculty members to an Advisory Council for the Institute. And from the very beginning the Institute has benefited from the enthusiastic support of Susan Sclafani, Chief of Staff for Academic Operations at the Houston Independent School District.

In the short term, however, the financial situation has been unexpectedly difficult. Still, very encouragingly, at Sclafani's request, HISD provided \$50,000 to help meet the budget for 1999. And an application made to the Houston Endowment, to be applied to commitments made by both HISD and the University of Houston, resulted on January 18, 2000, in a grant of \$150,000.



Houston Teachers Institute team members in New Haven, July 1999. (From left: Front row: Daniel Addis, Joy Teague, William J. Pisciella, Paul Cooke, and Ninfa A. Sepúlveda. Second row: Jurrell L. Gilliam and Natalie Martinez.)

The Houston Teachers Institute now has a vigorous group of teacher leaders.

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The Institute will mount six seminars again in 2000. They will include: "Adolescence and Alienation" (Professor William Monroe), "Global Warming and Air Pollution" (Professor James Lawrence), "Issues in Creativity" (Professor David Jacobs), "Critical Analysis of Greek and Roman Myths" (Professor Dora Pozzi), "Jazz and Its History" (Professor Noe Marmolejo), and "The Making of Mexican America" (Professor Guadalupe San Miguel).

The Houston Teachers Institute is in many respects vigorous and self-critical, and it is well-supported by faculty members and the school district. It has made great strides toward achieving a replication on its own terms of the program of the Yale-New Haven Teachers Institute.

Albuquerque Teachers Institute: Located in a state that ranks near the bottom of the nation on many economic and educational indices, including per capita expenditures on students and on teachers' salaries, and in a school district that has serious morale problems among teachers and a high attrition rate among students, the Albuquerque Teachers Institute has thus far been able to meet its considerable challenges. It brings the resources of the College of Arts and Sciences at the University of New Mexico, the flagship state institution of higher education, to a selected portion of a district that serves 85,800 students in 121 schools and enrolls a high percentage of Hispanic students from low-income families. This Institute has selected 21 middle and high schools where the problem of attrition is most serious. It has also sought to establish the relevance and interest of its program for both teachers and students by focusing on topics that link the Southwest and contemporary issues. In 1999, it offered four seminars for 36 teachers (35 of whom completed a curriculum unit): "Archaeoastronomy" (Michael Zeilik, Professor of Astronomy); "Environmental Impacts of Human Settlement and Urbanization on the Albuquerque Region" (Leslie D. McFadden, Professor of Earth and Planetary Sciences); "Architecture in the Southwest" (Anne Taylor, Professor of Architecture); and "Political Culture in New Mexico" (Phillip B. Gonzales, Associate Professor of Sociology).

This Institute is testing the workability of a Co-Directorship. Laura Cameron, who had been director of Freshman Mathematics and Planning Director for the project, was able to serve as Co-Director only for the first seven months of 1999. The other Co-Director, Wanda Martin, Associate Professor of English, who had been director of Freshman English, could serve for a longer period. After consultation with teachers and faculty, as well as with the Director of APS Strategic Professional Development, it was proposed by Wanda Martin and Michael Fischer, Dean of the College of Arts and Sciences, that Cameron be succeeded by Doug Earick, a senior teacher at Albuquerque High School, and a leader in the Institute planning process. Earick's appointment must be renewed (as must all the district's budgetary support) on an annual basis.

The President of the University of New Mexico, William C. Gordon, understands the Institute's distinctive qualities, has acquainted himself with the seminar topics, has read curriculum units, and is prepared to give strong administrative support. Dean Michael Fischer is also a strong supporter of the InstiThe Houston Teachers Institute is vigorous and self-critical, and well-supported by faculty members and the school district.

This Institute has selected 21 middle and high schools where the problem of a high attrition rate is most serious.

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Albuquerque Teachers Institute team meeting in New Haven, July 1999. (Clockwise from left: Lorraine B. Martinez, Les McFadden, Colston Chandler, Jennifer D. Murphy, Felipe Gonzales, Tom R. Mace, Douglas Earick, Wanda Martin, Susan C. Leonard, and Aaron B. Chávez.)

tute; and Superintendent Brad Allison and his associates have also indicated their support.

Co-Director Earick has very good contacts with teachers, is recruiting vigorously, and is being helped by enthusiastic Fellows. A detailed schedule was established for meetings of Teacher Representatives to determine seminars and invite applications. The handbook for Teacher Representatives is a model that might well be imitated by other Institutes, and there is an excellent brochure for general distribution. Although Representatives have not yet been established in all 21 schools being served, the Co-Directors have recruited Representatives from nine schools not represented in the 1999 seminars.

The 1999 curriculum units have been published and are on the Institute's Web site. There are links that also take one to the Web sites to which the teachers refer in their bibliographies. The plans for next year include some seminars that have no specific emphasis on the Southwest. The seminar schedule is also being revised, on the recommendation of both Fellows and seminar leaders, to extend the intensive period to four weeks, and to distribute materials in advance.

Six seminars are planned for 2000: "Weighing Environmental Risks: Uncertainties and Variables" (Professor David S. Gutzler, Department of Earth and Planetary Science); "The Indo-Hispano Cultural Legacy of New Mexico" (Professor Enrique Lamadrid, Department of Spanish and Portuguese); "Human Decision-Making: Rational and Irrational" (Professor Kate Krause, Department of Economics); "The United States of America: The Ideal and the Reality" (Professor Fred Harris, Department of Political Science); "Atomic America: Technology, Representation, and Culture in the 20th Century" (Professor Timothy Moy, Department of History); and "Literature and the Environment" (Professor Gary Harrison, Department of English).

Annual Report: The Work of the Four New Teachers Institutes

The Albuquerque Teachers Institute is working to develop sustainable funding. President Gordon approved a special legislative request that would jointly fund professional development projects in the Colleges of Education and Arts & Sciences. The COE project would train university faculty in using instructional technology, and A&S would contribute to teacher quality in the schools by providing Teachers Institute seminars in the humanities, sciences, and social sciences.

This request is extraordinary in its significance, for it gives equal importance to the funding of the Albuquerque Teachers Institute and the funding of the School of Education's proposal. Although the bill embodying this request was given first priority by the Commission on Higher Education, it did not obtain final legislative approval in 1999 because of the Governor's opposition to any education bill that did not provide for school vouchers. The proposal was renewed for 2000. It is now explicitly coupled with the expectation that state funding would require the Teachers Institute to expand in some fashion on a state-wide basis. President Gordon has said, however, that the University will financially support the Institute even without the State aid that has been requested.

The William Randolph Hearst Foundation has awarded the Institute a grant of \$42,500. Requests have also been made of other foundations.

UCI-Santa Ana Teachers Institute: To Santa Ana, a city with 52 schools serving 59,000 students, the UCI-Santa Ana Teachers Institute brings the resources of the nearby University of California at Irvine. The University has long worked with school systems in several neighboring districts, recently through its Center for Educational Partnerships. The UCI-Santa Ana Teachers Institute focuses on a selected 26 elementary, middle, and high schools, representing all four areas of the Santa Ana system.

The Principal Investigator for the project is William J. Lillyman, Executive Vice Chancellor. The Director is Barbara Kuhn Al-Bayati, who has been the Partnership Liaison in the Center for Educational Partnerships at the University.

This Institute has an opportunity to show that curriculum units work well in a mainly Hispanic environment where most students have limited fluency in English. This is of special importance because the California systems of education face serious problems as a result of the discontinuance of affirmative action admissions to higher education and the discontinuance of bilingual education in the schools. The legislature has therefore provided the state universities additional funds to work on outreach.

In 1999, the Institute offered six seminars for 52 teachers (45 of whom completed a curriculum unit): "Myths and Their Transformations", (Julia Reinhard Lupton, Associate Professor of English and Comparative Literature); "Discrete Mathematics and Computer Science" (Jean-Claude Falmagne, Professor of Cognitive Sciences, and Stephen Franklin, Assistant Director President Gordon approved a special legislative request that would jointly fund professional development projects in the Colleges of Education and Arts & Sciences.

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UCI-Santa Ana Teachers Institute team meeting with New Haven representatives, July 1999. (Clockwise from left: Tyra H. Demateis, Barbara Kuhn Al-Bayati, Thomas R. Whitaker of New Haven, Stephen D. Franklin, Mel E. Sanchez, James R. Vivian and Patricia Lydon of New Haven, Thelma W. Foote, Sharon W. Saxton, Elizabeth A. Enloe, Heidi R. Cooley, and Timeri K. Tolnay.)

of Academic Outreach in the Office of Academic Computing and Lecturer in Information and Computer Science); "The (Re)presentation of History in Film and Video: Narrative and Media" (Thelma Foote, Associate Professor of History and Acting Director of African American Studies); "The Hardy Personality in Theory, Research, and Practice" (Salvatore Maddi, Professor of Psychology and Social Behavior, and Deborah Khoshaba, Director of Program Development and Training for the Hardiness Institute); "Law and Morality" (John Dombrink, Professor of Criminology, Law, and Society); and "Theorizing U. S. National Identity through Multicultural Texts" (Lindon Barrett, Associate Professor of English and Comparative Literature).

The UCI-Santa Ana Teachers Institute has a committed group of seminar leaders and Coordinators. It also has a group of 20 Teacher Representatives that will work together more fully in the coming year. The faculty leadership here is potentially very strong. The Faculty Advisory Council is co-chaired by Professors Julia Lupton, John Dombrink, and Thelma Foote.

There is administrative support in the University and the School District at the highest level. After the Grant was awarded, Ralph J. Cicerone, UCI Chancellor, said, "Currently, Santa Ana high schools send only a small number of graduates to UC Irvine. This grant, along with UCI's other educational partnership programs, can help us in our efforts to change that." Executive Vice Chancellor Lillyman has stated that there should be no problem in obtaining necessary financial support for this Teachers Institute over the long term. Superintendent Al Mijares of the Santa Ana Unified School District has also expressed great enthusiasm for the Teachers Institute. Both Assistant Vice Chancellor Juan Francisco Lara and Executive Vice Chancellor Lillyman have spoken of the possibility of later expansion through the University of California system.

"Currently, Santa Ana high schools send only a small number of graduates to UC Irvine. This grant, along with UCI's other educational partnership programs, can help us in our efforts to change that." —Ralph J. Cicerone, UCI Chancellor

Annual Report: National Accomplishments

The curriculum units for 1999 have been published, and plans have been made for seven seminars in 2000. They include: "Natural History of Orange County" (Peter Bryant, Developmental and Cell Biology); "U.S. Literary Culture and Globalization" (John C. Rowe, English and Comparative Literature); "What Are the Chances of That? Probability in Everyday Life" (Amelia Regan, Civil and Environmental Engineering); "The Hardy Personality in Theory, Research and Practice" (Salvatore Maddi, Psychology and Social Behavior, and Deborah Khoshaba, Hardiness Institute); "Teaching Religion Critically" (John H. Smith, German); "Inventing America" (Michael Clark, English and Comparative Literature; Jacobo Sefamí, Spanish and Portuguese; and Steven Topik, History), and "Impacts of Computer and Networking Technologies on Education" (Stephen D. Franklin, Information and Computer Science.)

National Accomplishments

The Annual Report for 1998 gave a complete account of the distinctive pattern of needs and resources at each of the four new Teachers Institutes. Each is at a somewhat different stage of development; and each in certain ways may serve as a model for the establishment of Teachers Institutes elsewhere in the United States. The Institutes will also illustrate different patterns of relationship to state mandates, local resources, and institutional apparatus—and the state-funded universities will be especially interesting in this regard. Each site has also gone through a distinctive process in arranging for a director.

We have noted in this Annual Report some of the major challenges and accomplishments at each of the four new Teachers Institutes. Here we summarize briefly the most important accomplishments of the National Demonstration Project as a whole and note some of their implications.

The Project has already demonstrated in four different cities larger than New Haven:

• That a Teachers Institute serving approximately 20 schools can be rapidly inaugurated

• That such a Teachers Institute can immediately carry out a program of 4-6 content-based seminars in the humanities and sciences, which increase teachers' knowledge, heighten their morale, and result in individually crafted curriculum units of substance for use in classrooms

• That such Institutes will arouse the enthusiasm and support of significant numbers of teachers and university faculty members

• That such Institutes can attract support—including pledges of continuing support—from administrators of a private liberal

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At all four sites, many teachers who have been Fellows are becoming enthusiastic recruiters of new Fellows.

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All four Teachers Institutes are paying close attention to the mandates, standards, and interests of local school districts and state educational systems.

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arts college, a private university emphasizing the sciences, a flagship state university, and a major state university in a larger system

• And that high-level administrators in school districts, superintendents or their immediate subordinates, will be attracted by the idea of such an Institute, will start thinking about the local means of scaling-up, and will commit themselves to its long-term support

With regard to the prospects for continuity and sustainability beyond the terms of the Grant, the signs are optimistic indeed. At all four sites, many teachers who have been Fellows are becoming enthusiastic recruiters of new Fellows. At all four sites, faculty members are learning the importance of Institute procedures and with administrative help are forming Faculty Advisory Councils. At all four sites, top-level administrators in institutions of higher education have pledged to assist in the seeking of funds. At two sites (Albuquerque and Irvine-Santa Ana) they have pledged university financial support in addition. At all four sites, school districts have made a significant financial commitment. And at two sites (Pittsburgh and Houston), school administrators are providing significant help in the seeking of additional funds.

At the outset, we had not known how each site would meet the very stiff requirements of cost-sharing for this Grant. This has been accomplished significantly through the help of district funds but in a variety of ways. At UCI-Santa Ana the University is the major contributor; at Albuquerque the contributions of University and district are roughly equal; at Houston the district has been of primary assistance; and at Pittsburgh outside funding has been of greatest importance.

It is also important that all four of the Teachers Institutes are paying close attention, in different ways, to the mandates, standards, and interests of local school districts and state educational systems. Fellows have discussed the ways in which such standards may be tacitly or explicitly incorporated into the curriculum units. In Pittsburgh, Houston, and Albuquerque some seminars have emphasized local history, literature, geography, architecture, ecology, and economics. And in Pittsburgh there has been a special effort to make certain that both seminars and curriculum units are in accord with the district academic standards.

The prospects for longer-term scaling-up also look very good at this point. The Teachers Institutes at the four demonstration sites already point toward different means through which this might be accomplished. Al Mijares, Superintendent of the Santa Ana Unified School District, wrote on November 11, 1999, "I hope eventually that all of our teachers and students will benefit from teacher participation in the Institute." Susan Sclafani, Chief of Staff for Academic Operations at the Houston Independent School District, has stated that HISD is committed to establishing the Institute beyond the three-year implementation period, and she has offered to form a committee for long-range planning. She is also interested in the possibility of using some of the District funds for profes-

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sional development that are appropriated to each school as a means to assist the Institute. In Pittsburgh, two institutions of higher education have established a consortium that can serve as a model for expansion elsewhere. And in Albuquerque and Irvine-Santa Ana, top-level administrators are thinking about the possibility of expansion not just within one city but also elsewhere in the state.

A joint statement by President Esther L. Barazzone of Chatham College and President Jared L. Cohon of Carnegie Mellon University and a statement by Executive Vice Chancellor Lillyman of the University of California at Irvine will serve to illustrate the administrative support that is crucial to such scalingup—at these institutions and others throughout the nation.

In the course of contract negotiations, Presidents Barazzone and Cohon wrote on March 2, 1999, as follows:

On behalf of Chatham College and Carnegie Mellon University, we would like to reiterate our intent to function as a consortium in all aspects of the creation and sustenance of our Pittsburgh Teachers Institute. As proof of our commitment to this consortium, we have pledged to seek outside funding for the Pittsburgh Teachers Institute as a team. We have, respectively, charged our development personnel to work with Dr. Helen Faison and Mr. Phil Parr (Director of Planning and Strategic Development at the Pittsburgh Public Schools) in targeting foundation support for this project. Thus, we envision that neither Carnegie Mellon University nor Chatham College will have sole responsibility for raising matching funds. To the contrary, both institutions will have collective responsibility for raising these funds. The funds that our consortium raises and the funds that we receive from Yale University we hope to place in a unified Pittsburgh Teachers Institute account. . . . We believe that this accounting model reflects our true commitment to function as a consortium, not three separate entities.

In forwarding the Annual Report from the Irvine-Santa Ana Teachers Institute, Executive Vice Chancellor Lillyman wrote:

The goals and practices of the UCI-Santa Ana Teachers Institute are in keeping with the University of California and UCI's outreach mission, to expand educational opportunities for all Californians. Creating innovative opportunities for professional development is a key strategy in our efforts towards this goal. When teachers are inspired to take responsibility for the knowledge process through active engagement in reading, writing, and research, they can have a strong effect on the intellectual lives and futures of their students. "The chance to participate in a national dialogue on educational content and policy is an added benefit of this project." —William J. Lillyman, UCI Executive Vice Chancellor

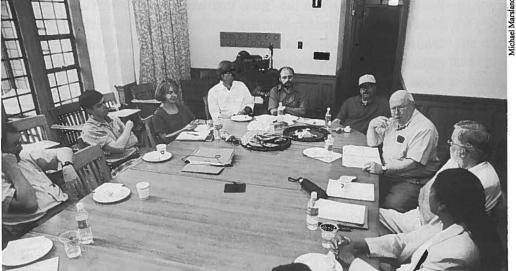
The chance to participate in a national dialogue on educational content and policy is an added benefit of this project, which combines serious and concerted focus on local problems with sustained reflection and interchange among sites across the nation.

This "interchange among sites across the nation" is a major objective of the National Demonstration Project. In fact, as the increasing collaboration evident in the Annual Conference, the establishment of Web sites, and the proposals for future Annual Conferences, additional national seminars, and a newsletter have indicated, this is also a swiftly developing area of national accomplishment. A substantial momentum now impels the Institutes at all five sites to work more closely with each other. And that accomplishment points toward the potential expansion of this effort in the future to include Institutes at yet other sites.

Learning in New Haven

In the Annual Report for 1998 we noted under this heading that the staff and the Implementation Team had become increasingly convinced that there is no substitute for direct observation and participation in the process of getting acquainted with the principles and practices of the Teachers Institute. We also noted that New Haven teachers and Yale University faculty members are learning as individuals, gaining among other things a heightened sense of being part of a national community of concerned educators. This year the July Intensive Session and, especially, the Annual Conference gave us as a group and as individuals a much clearer sense of participating in a collaborative endeavor.

We have also been watching carefully the organizational arrangements and the funding initiatives at each site for any clues they may provide that will be of



Meeting of national seminar leaders with faculty from Demonstration sites at the Intensive Session. (Clockwise from left: Stephen D. Franklin, Irvine; Rogers M. Smith, New Haven; Elizabeth Roark, Pittsburgh; John P. Wargo, New Haven; Felipe Gonzales, Albuquerque; Guadalupe San Miguel and Lawrence Curry, Houston; Colston Chandler, Albuquerque; and Thelma W. Foote, Irvine.)

New Haven teachers and Yale University faculty members are gaining a heightened sense of being part of a national community of concerned educators.

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benefit to our own operation. Certain seminars offered at the four sites may also alert us to topics that have been insufficiently explored by the Yale-New Haven Teachers Institute.

We also noted in the Annual Report for 1998 that some learning in New Haven is of provisional usefulness: it will depend upon whether we are able to proceed in the future with a second phase of the National Demonstration Project. If so, we said, there are a number of revisions in the Request for Proposals that should be made and the "Basic Commitments," now called "Principles," should also be strengthened and clarified. Our work with several sites this year concerning participant-leadership among the teachers and the responsibilities and functions of the Director of an Institute, and our continuing concerns about the "long-term" nature of the seminars, have further heightened our sense that these revisions would be needed. Our review of the "Basic Principles" in the light of this experience, and our assessment of the difficulties that arise when certain of them are misunderstood or ignored, lead us to the conclusion that each of these Principles is necessary to the distinctive nature of the Institute approach. Indeed, there are other commitments that might well be added-for example, the requirement of a faculty advisory council of some kind, and more detailed requirements for a body of Teacher Representatives composed of those actually participating in the seminars. A revision of the "Basic Principles," moreover, would ideally go somewhat further in spelling out the integral rationale that dictates them and the unfortunate consequences of assuming that certain of them are peripheral or unnecessary. And such a revision might well also divide certain of the Principles that contain multiple and quite distinct provisions.

As we work with the other Teachers Institutes now in operation, we are also gaining a fuller sense of the necessary balance between being a monitor of those Institutes and being a senior colleague. This balance has sometimes been difficult to maintain, especially when those at other sites have erroneously assumed that this Teachers Institute offers a "Yale approach" rather than something worked out in collaboration with the New Haven teachers, or when they have failed to recognize the actual flexibility of this approach and have mistakenly regarded its basic specifications as hindrances to their own independence and creativity. Here the learning must be mutual as we continue to work together.

On Common Ground

With support in part from the Carnegie Corporation of New York, the Institute published Number 8 (Winter 1998) of its periodical, *On Common Ground*, which has a national circulation to policy-makers, educational leaders, and funders. The Editorial, "Taking Stock and Looking Ahead," surveyed the four years of publication of this periodical, noting the high points in each Number, and making clear the scope and sequence that had been planned and supervised by the Editorial Board. It summarized the Institute's year of planning for the National Demonstration Project, and it concluded that *On Common Ground* would have

Our view of the "Basic Principles," and our assessment of the difficulties that arise when certain of them are misunderstood or ignored, lead us to the conclusion that each of these Principles is necessary to the distinctive nature of the Institute approach.

great potential as a means of disseminating their experience and their results to a wider readership of those interested in university-school partnership.

During 1998 and 1999, because funding had not been received for this purpose, no further Number of *On Common Ground* was published. Funds for its continuation are still being sought. In the meantime, plans are being laid for Number 9, to be published during the year 2000. The periodical will retain its broad focus on issues concerning university-school partnerships, but this Number, which had already been designated by the Editorial Board as focusing on "Urban Partnerships," will contain a special section featuring the National Demonstration Project. It will include articles from administrators, faculty, and teachers at the four new Teachers Institutes. Contribution of such articles was specified in the Request for Proposals as a condition of awarding a Grant to a demonstration site. The Editorial Board and the Editorial Advisory Board are also being reconstituted to facilitate this new emphasis for the periodical.

Looking Toward the Future

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As indicated in the section on "National Accomplishments," this first year of the National Demonstration Project has seen the establishment of four new Teachers Institutes, each of which has been successfully adapting the approach of the Yale-New Haven Teachers Institute to a situation with quite different needs and resources. There is clearly a desire on the part of all five Teachers Institutes to continue their collaboration in some form after the conclusion of the three-year grant from the DeWitt Wallace-Reader's Digest Fund. At each of the four new Teachers Institutes there is also considerable interest in the possibility of expansion, either within the city (Pittsburgh, Houston) or within the state (Albuquerque, Irvine-SantaAna). It seems likely that the Yale-New Haven Teachers Institute will seek funding to assist with the establishment of a second group of demonstrations, perhaps under a variety of auspices. Certainly the visibility of the National Demonstration Project would be greatly enhanced by an expansion of the group now established.

National Advisory Groups

National Steering Committee

The National Steering Committee, formed on the model of the Steering Committee that helps to guide the Yale-New Haven Teachers Institute, is composed of one school teacher from each site participating in the National Demonstration Project. Members of the National Steering Committee are selected by the Director of the Yale-New Haven Teachers Institute for a one-year term from January through December. They will be teachers prepared to help guide the project, to help plan the conferences, and to suggest topics most in need of discussion. They will provide and receive other advice and information, and help ensure that teachers play a leading role in the demonstrations and in the common work. They will also provide feedback on the usefulness of each meeting and will

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further the communication among the sites. A Steering Committee member must be—and must intend to continue as—a teacher in one of the public schools participating in the National Demonstration Project. In separate and joint meetings with the National University Advisory Council, they will provide a forum in which shared opportunities and problems can be discussed to the mutual benefit of all.

By agreeing to serve as a National Steering Committee member, a teacher accepts the following responsibilities. Each member:

1. Exerts leadership and participates actively in one or more of the major endeavors at a demonstration site

2. Participates as an Institute Fellow in the seminar offerings at that site in the year following selection as a National Steering Committee Member

3. Attends and comes prepared to meetings of the National Steering Committee in New Haven. During 1999 these meetings occurred during the January Orientation (January 8-9), the July Intensive (July 6-15), and the October Annual Conference (October 22-23)

4. Participates actively in the functions of the National Steering Committee

Members of the Steering Committee for 1999 include Marge McMackin of the Pittsburgh Teachers Institute, Ninfa Sepúlveda of the Houston Teachers Institute, Jennifer D. Murphy of the Albuquerque Teachers Institute, and Mel E. Sanchez of the UCI-Santa Ana Teachers Institute.



National Steering Committee meeting with members of the Yale-New Haven Teachers Institute Steering Committee, July 1999. (Clockwise from center rear: Mel E. Sanchez, Santa Ana; Peter N. Herndon, Pedro Mendia, and Jean E. Sutherland, New Haven; Jennifer D. Murphy, Albuquerque; Ninfa A. Sepúlveda, Houston; Margaret M. McMackin, Pittsburgh; and James R. Vivian.)

The National Steering Committee will help ensure that teachers play a leading role in the demonstrations and in the common work.

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The committee decided in January that its main tasks would be (1) to help to plan the July Intensive and the October Conferences, (2) to encourage teachers at their own sites to assume leadership roles in each Institute, and (3) to establish means of communication among teachers at the four sites that would not have to be funneled through the office of each Director. In April the committee then joined with the New Haven Steering Committee to make the final allocations to the national seminars. It then worked with a special planning committee to organize the program for the First Annual Conference in October. Meeting during that conference, it made many suggestions, most importantly that a newsletter be established for the National Demonstration Project.

National University Advisory Council

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The National University Advisory Council, formed on the model of the University Advisory Council that helps to guide the Yale-New Haven Teachers Institute, is composed of one university faculty member from each site participating in the National Demonstration Project. The members of the National University Advisory Council are selected by the Director of the Yale-New Haven Teachers Institute for a one-year term from January through December. They will be faculty members prepared to help guide the general direction of the project, to help plan the conferences, and to suggest topics most in need of discussion. They will provide and receive other advice and information, and help ensure that university faculty members play a leading role in the demonstrations and in the common work. They will also provide feedback on the usefulness of each meeting and will further the communication among the sites. In separate and joint meetings with the National Steering Committee of teachers, they will provide a forum in which shared opportunities and problems can be discussed to the benefit of all.

By agreeing to serve on the National University Advisory Council, a faculty member accepts the following responsibilities. Each member:

1. Exerts leadership and serves as an advisor at a demonstration site

2. Attends and comes prepared to meetings of the National University Advisory Council in New Haven. During 1999 these meetings occurred during the January Orientation (January 8-9), the July Intensive (July 6-15), and the October Annual Conference (October 22-23)

3. Participates actively in the functions of the National University Advisory Council

Members of the National University Advisory Council for 1999 include James Davidson of the Pittsburgh Teachers Institute, William Monroe of the Houston Teachers Institute, Colston Chandler of the Albuquerque Teachers Institute, and Thelma Foote of the UCI-Santa Ana Teachers Institute.



Members of the National University Advisory Council. (From left: Colston Chandler, Albuquerque; Thelma W. Foote, Irvine; and James Davidson, Pittsburgh.)

This Council decided in January that its main tasks would be (1) to help plan the July Intensive and the October Conferences, (2) to assist each site to keep before the university or college the appropriateness of faculty participation in outreach activities to schools, thus sharing much needed educational resources, and (3) to establish means of communication among faculty at the four sites (including an electronic ListServ) that would not have to be funneled through the office of each Director. It discussed at length the role and value of faculty participation at different kinds of institutions and the nature of their contribution to the larger community. There was agreement that a major aim of the National Demonstration Project should be the exploring of new roles and models for faculty in higher education in order to recognize their responsibility for education in the wider community and the nation. The Council also began deliberations on the appropriate participation of faculty in the July Intensive. In July it advised Jules Prown on the possible functions of TIFF, the electronic forum for faculty. It also worked with the special planning committee to organize the First Annual Conference.

National Program Documentation and Evaluation

Internal Documentation and Evaluation

Extensive and complex processes of evaluation, with elaborate questionnaires for Fellows and seminar leaders, have always been part of the procedures of the Yale-New Haven Teachers Institute. Such evaluation has been extremely important in persuading funders, the University, and others of the value of this effort. It has also been important as a continual self-monitoring that helps the Teachers Institute to chart its course into the future. For these reasons the National Demonstration Project requires that each of the new Teachers Institutes engage in very similar kinds of internal evaluation. Each is committed to undertaking at its own cost, in cooperation with the Yale-New Haven Teachers Institute, an annual review of the progress of the project. Each partnership assumes responsibility for a continuing self-evaluation. The Council discussed at length the role and value of faculty participation at different kinds of institutions.

Each partnership assumes responsibility for a continuing selfevaluation.

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Such internal documentation and evaluation at each site becomes part of a more comprehensive evaluation undertaken by the Yale-New Haven Teachers Institute and embodied in its annual and final reports to the DeWitt Wallace-Reader's Digest Fund. The four new Teachers Institutes provide Institute staff, the Yale-New Haven Teachers Institute Implementation Team, and other documenters sent by that Institute with full access to their activities and their documentation, including school and university personnel and sites. Significant failure to reach stated goals of the demonstration, or to maintain the demonstration in accordance with the conditions agreed upon, could result in the termination of the funding.

Each Teachers Institute submits interim financial reports, annual narrative and financial reports, and a final narrative and financial report. The contracts with the several sites spell out in detail the necessary contents of these reports.

The financial reports contain interim and annual financial accountings of expenditures made under the terms of this Agreement, including verification of cost-sharing. They set forth in detail the cost of operating the Institute, provide a documentation of other funds allocated to the Institute, and indicate the availability of long-term funding sources. The final report will provide such accounting for the full term of the Grant.

The annual narrative reports include as attachments two copies of all brochures, schedules, seminar proposals, curriculum units, questionnaires, reports, and news articles.

The first report, for 1999, explained how the new Institute is addressing certain concerns that were noted on the occasion of the awarding of the Grant. It also described the scope, the strategy, and the demonstration goals of the new Teachers Institute. It explained the process by which it has been established and maintained, the ways that it has adapted the New Haven approach, its current activities, and the progress made toward the specific goals of the site's demonstration. Subsequent reports will include continuing description of the Institute's activities and progress.

Each report also includes:

1. Evidence that the new Institute is faithful to the key parts of the New Haven approach (the Basic Commitments outlined in the Request for Proposals for Implementation Grants)

2. A summary description of the curriculum units developed by participating teachers, with information about the teachers' class-room use of the units and any other outcomes of their participation

3. A description of the relationship between participating school teachers and university faculty

4. An account of the ways in which teacher-participants in the seminars have exerted leadership in planning the seminars,

Annual Report: National Program Documentation and Evaluation

recruiting teachers, admitting Fellows to the seminars, monitoring their process, and assessing their results

5. Indication of the incentives for university faculty members and school teachers to participate

6. An analysis of the participation of school teachers in Institute activities (using surveys and other instruments developed by the Yale-New Haven Teachers Institute and modified as needed in conjunction with the several partnerships) that documents the number of teachers who apply, the representativeness of the teachers vis-à-vis the entire pool of teachers eligible to participate, and the teachers' and faculty members' assessments of the new Institute

7. An account of the assistance from the Yale-New Haven Teachers Institute that was needed, obtained, and used

8. An analysis of the factors contributing to, and hindering, the success of the new Institute

9. An analysis of the effects of the new Institute upon teacher empowerment, curricular change, and other issues central to school reform

10. Documentation of the partnership's collaborative work with the Yale-New Haven Teachers Institute (including responses to questionnaires dealing with the July Intensive Session in 1999 and the October conferences in 1999, 2000, and 2001)

11. An account of the progress made toward the goal of funding the new Institute beyond the period of this Grant

At least once during the grant period, an annual report will include a survey of the use of curriculum units by Fellows and non-Fellows in the school system. Each report will also include a summary that sets forth in brief compass the accomplishments and impact of the demonstration, the impediments encountered, the unanticipated outcomes, and the lessons learned thus far.

The annual reports may also, at the discretion of the partnership, include information that it has obtained based on assessment of curriculum units or system-wide surveys of their teachers. Though the sites may also undertake, and report on, evaluation of students who are being taught by Fellows in the adaptations, such evaluations will not be supported by the Grant for this project or any cost-sharing that is contributed to its budget.

The information gleaned from this documentation will be used for annual conferences and for directors' meetings, designed to provide continuing

conversation among the sites, to enable comparison and revision of the demonstrations in progress. It will also be used to inform the Institute's dissemination of the results of the project. It should have great usefulness for each of the demonstration sites in their local management, planning, and fundraising.

The final narrative report from the several sites will summarize the threeyear demonstration in terms of the items covered by the annual narrative reports and will then answer the following questions:

1. What do you think are the most important outcomes, impacts, and lessons learned from this project?

2. How has it changed the way in which your institution or other institutions may address these issues?

3. What plans do you have for continuing the partnership at your site?

4. Are there any other observations or reflections that you would now like to make about your partnership's work under this grant?

The information contained in these annual and final reports is being transmitted with the Yale-New Haven Teachers Institute's annual and final reports to the DeWitt Wallace-Reader's Digest Fund. Those reports by the Yale-New Haven Teachers Institute provide its own supplementary interpretation and assessment of the National Demonstration Project in accord with the criteria that have been specified in the awarding of the Implementation Grants.

External Evaluation

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The DeWitt Wallace-Reader's Digest fund has contracted with Policy Studies Associates, a research and social policy firm based in Washington, D.C., to evaluate the National Demonstration Project. The evaluation will examine the implementation of Teachers Institutes at universities and their partner schools participating in the project from 1999-2002.

The Fund is supporting the National Demonstration Project and its evaluation to accomplish two goals: to contribute to the professional development of teachers by supporting partnerships between universities and public school systems that draw upon the experiences of the Yale-New Haven Teachers Institute; and to gather information that will enable others to decide whether to build similar partnerships using their own resources. The Fund-commissioned evaluation will provide universities and public school systems throughout the nation with answers to the questions that they are likely to have about the utility of the National Demonstration Project as a source of ideas that they could use to create Teachers Institutes in their communities.

Annual Report: National Program Documentation and Evaluation

Over the course of their work, researchers will focus on examining and documenting the following:

• The experiences and perceptions of teachers who participate in the Institutes, as well as school administrators who interact with the Institute

• The recruitment process for participating teachers

• The educational partnerships between the university sites and their partner schools and districts

- The benefits that teachers gain from participating in the Institutes
- The cost of establishing a Teachers Institute
- Additional information to assist other interested universities and school systems in establishing their own Teachers Institutes

The Yale-New Haven Teachers Institute and the Institutes established at the partnership sites are cooperating fully with this assessment of the National Demonstration Project by Policy Studies Associates. The four new Teachers Institutes are providing the evaluators from Policy Study Associates with full access to their activities and their documentation, including school and university personnel and sites. This external evaluation is not being used for grant-monitoring purposes, which are entirely in the province of the Yale-New Haven Teachers Institute. The external evaluation will complement the information-gathering activities of the Yale-New Haven Teachers Institute, and will use and incorporate the information that this Institute collects.



Plenary Session with representatives of Policy Studies Associates at the First Annual Conference in New Haven, October 1999.

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FINANCIAL DEVELOPMENTS

During 1999 the Institute received from Arthur Vining Davis Foundations a grant of \$150,000 in support of Centers for Curriculum and Professional Development in the high schools. Other Centers in elementary, middle, and high schools receive support from a three-year grant of \$139,400 the Institute received in 1997 from the Jessie Ball duPont Religious, Charitable and Educational Fund.

In 1999 the William Randolph Hearst Foundation approved a further grant of \$150,000 toward the William Randolph Hearst Endowment Fund for the Institute. The Institute also began to make use of the three-year grant of \$150,000 given in 1998 by the McCune Charitable Foundation in support of the National Demonstration Project. And it continued to make use of a two-year grant of \$100,000 given in 1998 by the Horace W. Goldsmith Foundation to support operations of the Institute.

A grant from the Sherman Fairchild Foundation of \$177,311 and a grant from the Camille and Henry Dreyfus Foundation of \$40,000 are continuing to provide support for seminars in the sciences for 1999 and 2000. The Institute also received other gifts and grants from individuals and smaller foundations.

The four-year support of the National Demonstration Project by the DeWitt Wallace-Reader's Digest Fund has made possible a restructuring and enlargement of the Institute staff to include an Assistant Director, Production Associate, and Financial and Database Coordinator. It has also made possible a new database for the Institute, which will integrate most of the data in four categories accounting, programs, mailing, and fundraising—and generate various kinds of applications for daily use.

The Institute is currently seeking funds that might be used for seminars in either the humanities or the sciences. Its principal long-term need is for an endowment that would provide continuing support for seminars in the sciences.

The Institute is also preparing to seek funds to support the next phase of the national initiative. Although the magnitude and duration of this phase are yet to be determined, its aim will be to assist the continuation of the group of the Institutes now established and to encourage the creation of yet other Institutes across the nation. The initiative may well require a "partnership" between the Yale-New Haven Teachers Institute and one or more foundations or funds.

CONCLUSION

During 1999, the Yale-New Haven Teachers Institute continued to make progress in its two complementary areas of activity: the local and the national.

In New Haven it conducted a program of seven seminars for Fellows. It continued its expansion of Centers for Curriculum and Professional Development in the schools (with eleven Centers thus far and one more expected in the near future). It developed further the relationship of its resources to school curricula. And it pursued its fund-raising to ensure the continuation of its activity in New Haven and across the country in the longer term.

Progress on the national level has been most notably assisted by a four-year grant from the DeWitt Wallace-Reader's Digest Fund, and a supplementary three-year grant from the McCune Charitable Foundation, for the establishment of a National Demonstration Project. The Yale-New Haven Teachers Institute has now completed the first year in a three-year process of working with four other Teachers Institutes that looks toward the establishment of a long-term collaboration. This Project has begun to create a network of Teachers Institutes across the country that can serve as a model for university-school collaboration. The periodical *On Common Ground* may become a vehicle for the dissemination of the progress and results of the Project, in order to encourage the establishment of yet more Teachers Institutes in other urban centers in this nation.

The Yale-New Haven Teachers Institute and the National Demonstration Project have received much attention in the press. Periodicals in Pittsburgh, Houston, Albuquerque, and Irvine shared the news of the establishment of Teachers Institutes in those cities. The *Pittsburgh Post-Gazette* and the *Pittsburgh Tribune-Review* carried articles on the achievements of Fellows in that Teachers Institute. And Robert J. Leeney, editor emeritus of the *New Haven Register*, celebrated a "thriving school improvement program" that has become "a national model." "The Yale-New Haven Teachers Institute is an outstanding program, bringing together educators at all levels," said President Richard C. Levin in announcing the National Demonstration Project. "We are delighted that the Institute will be able to serve as a national model for similar university-school partnerships across the country."

APPENDIX

Committees, Councils, and Boards of the Institute

National Advisory Committee

Gordon M. Ambach Leon Botstein Donna V. Dunlop Richard Ekman Norman C. Francis I. Michael Heyman Bonnie B. Himmelman Owen M. Lopez Ilene Mack Jane Quinn Robert Schwartz Theodore R. Sizer Donald M. Stewart David L. Warren Glegg L. Watson

University Advisory Council

Honorary Chairman Howard R. Lamar Co-Chairmen Jules D. Prown Rogers M. Smith Sabatino Sofia

Executive Committee Kent C. Bloomer Paul H. Fry Gary L. Haller Mary E. Miller Brigitte Peucker Cynthia E. Russett Harry S. Stout Rev. Frederick J. Streets

Members Bruce D. Alexander Sidney Altman Scott B. Bennett Murray J. Biggs Richard H. Brodhead D. Allan Bromley Richard L. Burger Robert A. Burt Jon Butler Edward S. Cooke, Jr. Sheila DeBretteville Margaret A. Farley Margot Fassler Roberto González-Echevarría Susan Hockfield Frederic L. Holmes Gilbert M. Joseph Traugott Lawler Richard C. Levin

Linda K. Lorimer J. Michael McBride A. Patrick McCaughey Sharon M. Oster David Pease Jaroslav Pelikan Patricia Pessar Linda H. Peterson Leon B. Plantinga Jock Reynolds III Dr. Margretta R. Seashore Jonathan D. Spence Deborah T. Thomas Gerald E. Thomas Frank M. Turner John P. Wargo Robert G. Wheeler Thomas R. Whitaker Robin W. Winks Brvan J. Wolf Werner P. Wolf Robert Wyman Michael Zeller Kurt W. Zilm

Steering Committee

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School Representatives and Contacts

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Pamela M. Kellev Waltrina D. Kirkland-Mullins Robin Lally Jeanne Z. Lawrence Joseph H. Lewis Richard R. MacMahon Janice Markey Therese Matthews Patsy Mayo Roberta A. Mazzucco Pedro Mendia Sandra L. Nash Susan L. Norwood Bonnie M. Osborne **Emma Pinette** Judith Puglisi Lucia Rafala Roberta Ranciato Luis A. Recalde Gwendolyn Robinson Sylviana Rodriguez Eddie B. Rose **Burton Saxton** Michele Sepulveda David Simpson Grayce H. Storey Mary E. Stewart Jean E. Sutherland Yolanda U. Trapp Paul E. Turtola Bethania H. Urena Hernandez Ladora Wade-Twitty Lois Van Wagner Douglas von Hollen Carolyn S. Williams Cynthia E. Wilson Barbara W. Winters

Seminar Coordinators

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Implementation Team

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New Haven Public School

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National Steering Committee

Margaret M. McMackin Jennifer D. Murphy Ninfa A. Sepúlveda Mel E. Sanchez

National University Advisory Council

Colston Chandler James Davidson Thelma W. Foote William Monroe

On Common Ground Editorial Board Sharon M. Floyd Manuel N. Gómez Patricia King Edward C. Kisailus Sharon Olguin Thomas E. Persing Jay L. Robinson Charles S. Serns Thomas R. Whitaker,

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Editorial Advisory Board

Adrienne Y. Bailey René Castilla Lucy Davis Thomas Furtado Dixie Goswami Kati Haycock Vinetta Jones Gene I. Maeroff John Merrow Jules D. Prown Leo Rockas Adele Seeff Thomas Toch Gita Z. Wilder

SELECTED BIBLIOGRAPHY

Institute Publications

Centers for Professional and Curricular 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. 136 volumes, 1978-1999.
"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, 1978-1999.
Index of All Curriculum Units, 1978-1999. New Haven: 1999.
"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

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.

"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.

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.

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