



YALE-NEW HAVEN TEACHERS INSTITUTE

Annual Report 2000

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

Since its inception in 1978, the Institute has been recognized repeatedly as a pioneering and successful model of university-school collaboration; in 1990 it became the first program of its type to be permanently established as a function of a university. In 1998 the Institute launched a national 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.

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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 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

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each write a curriculum unit to be used in their own classroom and to be shared with others in the same school and other schools through both print and electronic publication.

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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-third year, the Yale-New Haven Teachers Institute has offered 143 seminars to 491 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 1,288 curriculum units. Over the years, a total of 75 Yale faculty members have participated in the Institute by giving one or more seminars. Forty-nine of them have also given talks. Thirty-five other Yale faculty members have also given talks. At this date about half of these 110 participants are current or recently retired members of the faculty.

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

This effort involved in 1998 the planning stage of a National Demonstration Project, supported by the DeWitt Wallace-Reader's Digest Fund (now the Wallace-Reader's Digest Funds). In 1999 partnerships were established between colleges or universities and school districts at four sites that planned to adapt 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 enable them to work with the Yale-New Haven Teachers Institute for a period of three years, from 1999 through 2001. It now appears that all four of the new Teachers Institutes will be able to continue in some form after the current Grant. The Yale-New

Haven Teachers Institute hopes to work with them as it undertakes a longer-term process of expansion that will enable the establishment of yet other Teachers Institutes across the country.

The two major sections of this report therefore describe the two complementary areas of activity undertaken by 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 2000 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 2001. 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 on-line, 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 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 third of four years to be devoted to the National Demonstration Project supported by the DeWitt Wallace-Reader's Digest Fund (now the Wallace-Reader's Digest Funds). It begins by describing the roles played by the Yale-New Haven Teachers Institute in this Project. It then describes the second year of common work in which all five of the Teachers Institutes have been engaged. It draws upon evaluations written by school teachers, university faculty, and directors from the four new Teachers Institutes who participated in the Directors' Meeting in April (held in New

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York) and the Second Annual Conference in October (held in New Haven). It also describes the work 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 Haven 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. These evaluations provide 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 conducted by Policy Studies Associates, commissioned by the Wallace-Reader's Digest Funds to perform this task.

Looking toward the future, the report then points out the opportunity for further expansion of the newly established network of five Teachers Institutes. It offers a preliminary account of the Draft Proposal for two years of consolidation, intensification, and preparation on the part of all five of the existing Teachers Institutes, to be followed by a longer period during which additional Teachers Institutes would be established in many states.

Financial Plans

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

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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 2000 this process, as described later in the report, resulted in the mounting of seven seminars, four in the humanities and three in the sciences.

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

"Women Writers in Latin America,"

led by Sandra H. Ferdman-Comas, Assistant Professor of
Spanish and Portuguese

"Crime and Punishment,"

led by Ian Shapiro, Professor of Political Science

"Constitutional and Statutory Privacy Protection in the 21st Century,"

led by Rogers M. Smith, Alfred Cowles Professor of Government

"Ethnicity and Dissent in American Literature and Art,"

led by Brian J. Wolf, Professor and Chair of American Studies and
Professor of English

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

"Sound and Sensibility: Acoustics in Architecture, Music, and the

Environment," led by Robert E. Apfel, Robert Higgins

Professor of Mechanical Engineering

"Bioethics,"

led by Arthur W. Galston, Eaton Professor Emeritus of Botany and of
Molecular, Cellular, and Developmental Biology

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

"The Chemistry of Photosynthesis,"

led by Gary W. Brudvig, Professor of Chemistry

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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, 2000, 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.

This seminar sought to understand more fully how to read a literary work and to understand more intimately the lives of women in Latin America.

Women Writers in Latin America

This seminar read poetry and prose by such women writers as Teresa de la Parra, Esmeralda Santiago, Alfonsina Storni, and Gabriela Mistral. It sought to understand more fully how to read a literary work and to understand more intimately the lives of women in Latin America.

The curriculum units often dealt with history and biography as well as literary texts. Christine Calvanese included a brief history of the Dominican Republic and Puerto Rico in her unit on Santiago's *When I Was Puerto Rican* and Julia Alvarez's *How the García Girls Lost Their Accents*. Christine Elmore presented in historical context the lives of Frida Kahlo, Rigoberta Menchú and Gabriela Mistral. Dora Odarenko focused on certain features of Puerto Rican life. Diana Peña-Pérez analyzes the use of the terms Hispanic and Latino in relation to Spanish-speaking immigrants to the United States. Michelle Sepulveda presented a gallery of pictures from life in the Caribbean according to Latina writers. Other units focused more exclusively upon the texts themselves. Lisa Galullo showed how to analyze point of view, narrative style, voice, and cultural identity in an autobiographical text. And Yolanda Trapp offered her own translations of a variety of poems that may be read to children.

The curriculum units written in the seminar, with their recommended uses, included: "A Woman's Immigrant Experience," by Christine Calvanese (English and Reading, grades 7-10); "Exploring Character and Culture in the Lives of Three Remarkable Women of Latin America," by Christine A. Elmore (Language Arts, Reading, and Social Studies, grades 2-5); "Truth and Identity in Autobiography: Teaching Esmeralda Santiago's Novel *When I Was Puerto Rican*," by Lisa Galullo (English and AP English, grades 9-12); "Nuestra Isla Our Island: Puerto Rico," by Dora Janeway Odarenko (Language Arts and social Studies, grades 2-4); "Understanding Ethnic Labels and Puerto Rican Identity," by Diana Peña-Pérez (Social Studies, Spanish, and Language Arts, grades 7-8); "Galeria de Pinturas," by Michelle Sepulveda (Drama and Dance, grades 5-8); and "The Power of Latin Women's Poetry," by Yolanda U. Trapp (Language Arts, Social Studies, Multicultural Studies, Science, and Special Education, grades K-5).

Crime and Punishment

This seminar dealt with topics in the theory and practice of crime and punishment in contemporary America from the standpoint of politics and political theory. The readings and seminar discussions were organized around four topics: moral foundations of the criminal law; players and procedures in the criminal law; politics and the criminal law; and the edges of the criminal law.

The Fellows in the seminar worked on a variety of topics that to some extent cut across, and drew on, all four areas. Joan Rapczynski focused on the Fourth Amendment to the Constitution. Angela Beasley-Murray explored the different legal tests for criminal culpability and the extent to which these comport with common sense understandings of insanity as well as standard medical definitions. Joyce Bryant explored various ways in which the criminal justice system stands in need of reform if democracy is to speak through the criminal law. Four Fellows developed units on different aspects of the juvenile justice system. Deborah Smereczynsky focused on the constitutional rights of juvenile offenders. Cynthia Roberts dealt with status offenses-activities that would not be crimes if committed by adults-and the role of the juvenile court. Joseph Wickliffe dealt with debates about the causes of juvenile delinquency. And Afolabi J. Adebayo dealt with the disposition of juvenile offenders.

The curriculum units, with their recommended uses, included: "Rehabilitation and Control of Juvenile Delinquency Offenders," by Afolabi James Adebayo (grades 7-12); "...By Reason of Insanity: An Exploration of the Mental Disease/Defect Defense," by Angela Beasley-Murray (grades 9-12); "Democracy Speaks Through Criminal Law?," by Joyce Bryant (grades 7-8); "Search and Seizure," by Joyce Rapczynski (U.S. History, grades 10-11); "Juvenile Delinquency: Cause and Effect," by Cynthia H. Roberts (Social Studies and Civics, grades 7-12); "Juvenile Justice/The Real Deal," by Deborah Smereczynsky (U.S. History and English, grades 7-8); and "Why Juveniles Commit Crimes," by Joseph A. Wickliffe (Social Studies, grades 9-12).

Constitutional and Statutory Privacy Protections in the 21st Century

This seminar explored problems of protecting privacy that result from the rapid proliferation of new avenues of communication and from the surprisingly little pertinent constitutional or statutory law aimed at providing such protection. It examined legal cases described in Ellen Alderman and Caroline Kennedy, *The Right to Privacy*, along with excerpts from landmark Supreme Court cases, important statutes, and some pertinent news stories.

This seminar dealt with the theory and practice of crime and punishment in contemporary America from the standpoint of politics and political theory.

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The Fellows created curriculum units that employed “privacy” questions to advance learning by a wide range of students. High school business students will learn about the “cookies” that track their browsing habits. Business law students will examine the legal protections against “cybercrime” and the dangers that regulations pose for freedoms of expression. High school history students will learn about the systematic denials of privacy rights experienced by many African Americans, which now serve as precedents for limiting student rights. Students with disabilities and others will learn about the special concerns of the disabled not to be subject to special restrictions or compelled to disclose information that might subject them to job discrimination and embarrassment. Middle school students will vividly discover how pervasive video surveillance in public places how is, including many schools. High school students will learn about the controversies over whether certain kinds of writing assignments represent invasions of student privacy. And gifted middle school students will be invited to ponder and debate whether the reproductive freedoms protected in the contraception and abortion “privacy” cases extend to new kinds of genetic engineering, including cloning and genetic enhancement.

Curriculum units, with their recommended uses, included: “Invasion of Privacy—Has Cyber-technology Made Privacy a Thing of the Past?,” by Valerie Arrington-Steele (Computer Literacy, History, Law, English, and Computer Applications, grades 10-12); “How Public Should Public Education Be?,” by Jennifer Drury (English and Social Studies, grades 9-10); “The Information Highway & Your Right to Privacy,” by Leslie Judd-Paier (Business Law, grades 10-12); “Democracy, Race, and Privacy: The Hypocritical Failures of the United States,” by Jimmy-Lee Moore (History and Critical Thinking, grades 7-12); “Privacy in the Age of Video surveillance: This Is Not Your Father’s Candid Camera,” by Angelo J. Pompano (Video Production, Social Studies, Reading, Writing, and Speaking, grades 7-8); “Privacy Issues and Disabled Persons,” by Joanne R. Pompano (Special Education, History, Law, and Social Studies, grades 11-12); and “Human Cloning, Genetic engineering and Privacy,” by Carolyn Williams (Science, Writing and Drama, grades 7-9).

Ethnicity and Dissent in American Literature and Art

The goal in this seminar was to compare and evaluate the many traditions of dissent in American literature and the visual arts. Though artists of color have been producing art for centuries, their work often has found no place in the public school curriculum. At best, it may be confined to special weeks during which we celebrate ethnic and racial histories, or it is taught informally by teachers who wish to supplement the curriculum. In this seminar, the Fellows took as a theme the notion of “double consciousness” articulated by W. E. B. Du Bois. They examined versions of this theme in the work of the colonial poet Phillis Wheatley, in that of several twentieth century writers and artists—Sandra Cisneros, Carmen Lomas Garza, Toni Morrison, Fred Wilson, Robert Colescott, Hisaye Yamamoto, and Leslie Marmon Silko—and in the film *Lonestar* by John Sayles.

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For their curriculum units the Fellows covered a variety of topics. Val-Jean Belton focuses on painters and sculptors of the Harlem Renaissance. Leslie Fellows considers the issues of entrapment, anger, and the search for a new identity as she provides a wide-ranging sample of women writers over the past 150 years. Donna Frederick-Neznek introduces her high school art students to the history of Japanese Americans and then looks in particular at the work of Roger Shimomura. Sandra Friday integrates English lessons with art instruction as she looks at the Harlem Renaissance. Leigh Highbridge asks her theatre students to explore the ways that they do (and don't) interact with students of other ethnicities. Geraldine Martin introduces her elementary students to the customs and culture of Mexico by combining children's stories with the use of puppets. Jon Moscartolo helps his middle school art classes understand how HIV/AIDS can provoke responses like those found in racial discrimination. He has his students produce self-portraits that incorporate the lessons learned from viewing portraits he has created of individuals and families from a summer camp for children with HIV/AIDS. Dina Secchiaroli takes her high school literature students on a tour of Latino communities in the United States, instructing them in the culture, customs and literature of each group. And Jean Sutherland, drawing on a variety of children's books, introduces her elementary school students to the ways that slaves fought and resisted the inhumane conditions of plantation slavery.

Curriculum units, with their recommended uses, included: "African-American Art and the Political Dissent of Aaron Douglas during the Harlem Renaissance," by Val-Jean Belton (AP Studio Art and Advanced Art, grades 10-12); "Women Writers and Dissent in 20th and 21st Century Literature," by Leslie Fellows (English, grades 9-12); "Our Past Acclaims Our Future, Japanese-American Artists Respond to the American Experience: Roger Shimomura, Sansei," by Donna Frederick-Neznek (Art and History, grades 9-12); "The Harlem Renaissance Births a Black Culture," by Sandra K. Friday (American Literature, Art, and English, grades 9-12); "'What's In Your Medicine Cabinet?' Exploring the Culture Heritage of Our Personal Belief Systems," by Leigh Highbridge (Acting and Theatre, grades 9-11); "Friday and Friends: A Prospectus of the Mexican Family through Children's Literature," by Geraldine Martin (Reading and Language Arts, grade 1); "HIV/AIDS and the Healing Community: Self-Portraits Towards Wellness," by Jon Moscartolo (Art, grade 8); "Latin Culture through Art and Literature," by Dina Secchiaroli (English, Art and History, grades 9-12); and "Using Children's Literature and Art to Examine the African-American Resistance to Injustice," by Jean E. Sutherland (Reading, Language Arts, and Social Studies, grades 3-6).

Sound and Sensibility: Acoustics in Architecture, Music, and the Environment

The premise of this seminar was that through an understanding of the aspects of acoustics, one can approach education and culture from a unique perspec-

tive. There is strong appeal in using sound as a vehicle to motivate education in mathematics and science or to understand how diverse cultures have employed music in celebrations and every day life. In developing their curriculum units, several Fellows began with what we already know intuitively and built on that knowledge. Others were concerned to enable students to become more attentive to our acoustical environment, whether in understanding music better or in understanding the impact of environmental noise upon our lives. Others focused on the power of speech and its uses in story and drama.

A team of Fellows from East Rock Global Magnet School—Doreen L. Canzanella, Judith Dixon, Jacqueline Porter, and Joseph H. Lewis—focused their units upon the cultures of Brazil and Kenya, integrating geography, social studies, and music to trace the traditions of those countries and show how European and African influences were exported to the emerging culture of Brazil. The teaching of their units will culminate in a school festival.

Two teachers from Roberto Clemente Middle School—Mary Jones and Pamela Tonge—created units that will combine science, music, and reading. Yel Hannon Brayton from Betsy Ross Arts Magnet Middle School focused on the use of speech in theatre and creative writing. Lewis Spence, from the same school, and Andrea Sorrells, who teaches in high school, focused in different ways upon the mathematics of sound. And Eddie Rose, from Riverside Education Academy, explored the relationship of architectural sound to science and mathematics.

Curriculum units, with their recommended uses, included: "Tuning the Instrument for Actors and Writers," by Yel Hannon Brayton (Theatre, Drama, and Creative Writing, grades 5-8); "Exploring the Folk Instruments and Sounds of Kenya and Brazil," by Doreen L. Canzanella (International Studies, Science, and Music, grades 6-10); "Brazilian Culture through Music," by Judith Dixon (Social Studies, Music, and Science, grades 4-5); "Math and Science Objectives Taught Using Sound and Music Concepts," by Mary Elizabeth Jones (Mathematics and Science, grades 5-7); "The Science of Sound and Musical Instruments," by Joseph H. Lewis (Science, grades 4-6); "The Sounds of Samba," by Rosemarie Crocco Mongillo (World Geography and Cultures, grades 9-12); "The Sound of Music in Kenya," by Jacqueline Porter (Social Studies, Science, and Music, grades 6-8); "The Acoustics House," by Eddie B. Rose (Algebra and Geometry, grades 6-12); "Sounding Off About Trig," by Andrea Sorrells (Algebra II, Trigonometry, and Physics, grades 9-12); "Discovering the Mathematics in Sound," by Lewis L. Spence (Algebra, grade 8); and "Basic Reading of Sound Words—Onomatopoeia," by Pamela J. Tonge (Reading and Language Arts, grades K-6).

The Chemistry of Photosynthesis

The focus of this seminar was to provide some answers to the question of how plants make food in the process of photosynthesis. The goal was to develop materials that could be incorporated in the science curriculum of the New Haven Public Schools. Many demonstrations were included in the seminar. They were chosen so that they could actively involve the students and also illustrate many of the chemical processes. David Walker's *Energy, Plants and Man* was the primary text. Discussions largely followed the sequence of topics in this book. *Photosynthesis*, by D. O. Hall and K. K. Rao, was a supplementary text. The seminar began with a historical discussion (and demonstration) of the scientific advances leading to the understanding that plants use light to convert carbon dioxide and water into sugar and oxygen gas. This was followed by discussions and demonstrations of the nature of light, the absorption and conversion of light to chemical energy, and the process of carbon fixation. The seminar concluded with discussion of the role of photosynthesis in the evolution of the earth's atmosphere, current concerns over the greenhouse effect and ozone depletion, and energy use in the future.

In all of the curriculum units, science content is integrated with language arts, mathematics, and social studies to provide a balanced program that meets the literacy requirements of the New Haven Public Schools. Several Fellows developed units around a theme or activity related to photosynthesis. These include a fact-finding effort on the importance of plants to the atmosphere that culminates in a court case over urban development, studies of plants in order to develop urban gardens, and responses to a letter from Mr. McGregor requesting help with his garden.

Curriculum units, with their recommended uses, included: "Ph-ocusing on Photosynthesis In and Out of the Garden," by Francine C. Coss (Science, Mathematics, and Language Arts, grades 1-3); "How Plants Help Us Breathe," by Roberta A. Mazzucco (Science, grades 2-5); "Gardens in an Urban Environment," by Luis Recalde (Science and Social Studies, grades 2-6); "Purification v. Population: Green v. Grey—The Plant Kingdom's Impact on Air Quality," by Maureen Taylor-French (Earth Science, grade 8); and "McGregor's Garden, Peter Rabbit and the Plant-tastic World of Photosynthesis," by Kathleen Ware (Science, grades K-2).

Bioethics

This seminar went beyond the original limitation of this field to medicine and included also the fields of genetic ethics (which includes both medical and agricultural components) and environmental ethics. The texts were *Ethical*

The goal was to develop materials that could be incorporated in the science curriculum of the New Haven Public Schools.

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Issues in Modern Medicine, by John Arras and Bonnie Steinbock, and *State of the World 2000*, by Lester Brown et al. The seminar devoted the first two weeks to discussion of various ethical theories and their applicability to modern bioethical problems; thereafter it dealt with problems outlined in the two books and, later on, in the current press.

Two of the curriculum units deal with food. Waltrina Kirkland-Mullins leads her first grade students to appreciate the biological sources of the common foods they eat and the bases for an adequate nutritional regime. Richard MacMahon examines with his high school students the genetic engineering of agricultural crops and analyzes the political, social, economic and ideological controversies surrounding their use in Europe and America. Other units focus on a variety of topics. Lynn Marmitt summarizes modern thought and progress in genetics and cell biology for her seventh grade students and then moves to a discussion of ethical problems associated with the human genome project and the cloning of organisms. Carolyn Kinder, an assistant principal, provides a summary of ethical theories related to the problem of developing a fair, effective, and sustainable medical system for the United States. And Grayce Storey prepares for her middle school students a unit on the subject of surrogate motherhood, emphasizing the different roles played by genetic, gestational, and care-giving parents, and drawing much of her ethical analysis from scriptural sources.

Curriculum units, with their recommended uses, include: "Inside Out: An Up-Close Look at Foods We Eat," by Waltrina Kirkland-Mullins (Science, Social Studies, and Language Arts, grades 1-2); "Genetic Engineering of Crop Plants," by Richard R. MacMahon (Biology, Genetics and Evolution, and Bioethics, grades 9-12); "Brave New World: Genetics in the Modern World," by Lynn Marmitt (Integrated Science and Geology, grades 6-9); "Bioethics and Effective Health Care," by Carolyn Kinder (Science and Social Development, grade 7); and "Ethical Problems surrounding Surrogate Motherhood," by Grayce P. Storey (Home Economics, Civics, and Science, grades 7-12).

The Process of Determining the Seminar Topics

Between October and December 1999, 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 2000. (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.

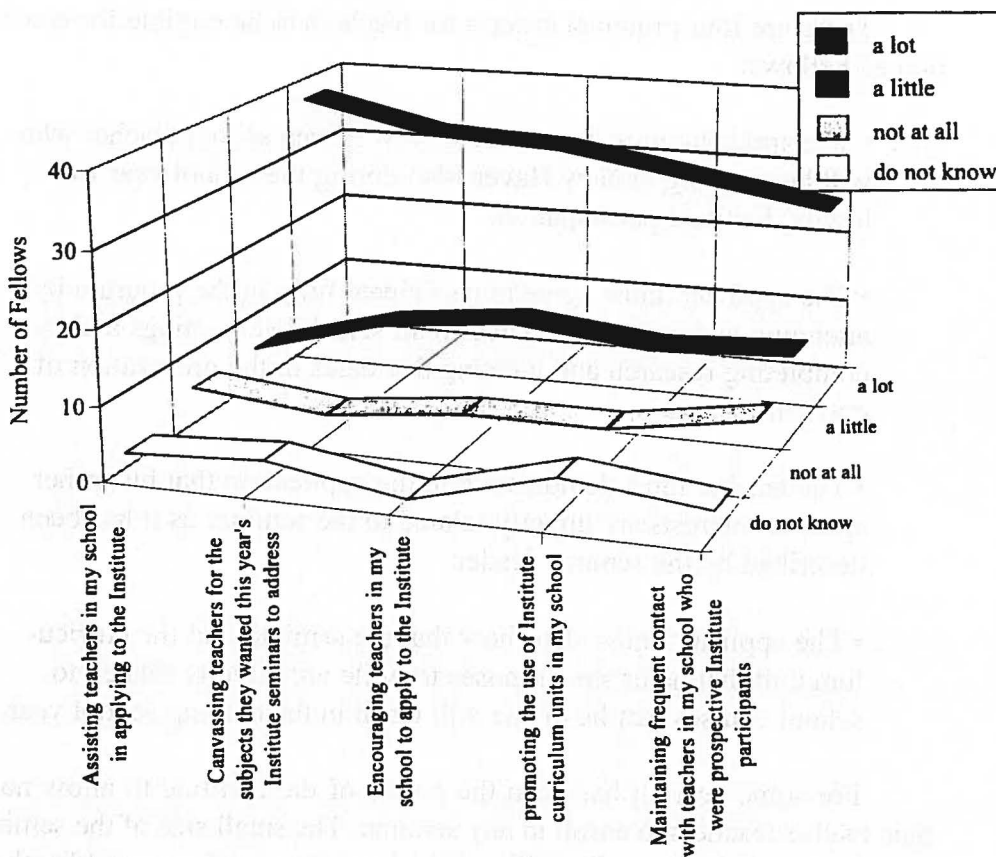
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In their evaluations, the 2000 Fellows indicated that the Institute Representative for their school had been helpful in many ways: by maintaining frequent contact with them, asking for their views on seminar subjects for the following year, encouraging 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 Representatives.) As a result, 30 (59 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 rather less satisfaction with these arrangements than reported last year (72 percent).

In their evaluations, the 2000 Fellows indicated that the Institute Representative for their school had been helpful in many ways.

Chart 1

Institute Representatives' Helpfulness to the 2000 Fellows



The Fellows' Application and Admissions Process

Having worked with teachers in their respective schools during the preceding months, the Institute Representatives met on January 4 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.

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On January 11 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.

On January 18 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 25. This date was selected so that teachers would apply in advance of the February school vacation. The office would then have the vacation period to process application materials, and the review of applications could be completed during February to provide the earliest possible notification to teachers who were accepted.

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

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

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.

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 62 teachers expressed definite interest in participating in one of the seminars to be offered. Of those teachers, 18 were from high schools, 4 from transitional schools, 15 from middle schools, 11 from K-8 schools, and 14 from elementary schools. By the application deadline, the Institute Representatives, assisted by the school Contacts, had obtained applications from 62 elementary, middle, and high school teachers in the humanities, social sciences, and sciences, somewhat fewer than the record

numbers of the previous four years. It appears that this reduction in the number of applications may be a result of the fact that during 1999-2000 a smaller number of Representatives were able to serve, and their places had been taken by Contacts, who did not recruit so vigorously. It is notable, however, that there was an increase in the number of applications to seminars in the sciences, which for the first time accounted for nearly half of the total number.

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 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

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significant opportunity for Institute Representatives to talk with their principals about the Institute.

It is very important, of course, that principals appreciate nature and the importance of the curriculum units that teachers in their school will be designing. For that reason we include here some excerpts from the principals' comments on the Fellows' applications:

The planned unit reflects the third grade curriculum and emphasizes an interdisciplinary and integrated approach.

Our 7th grade students study Global Issues for our Magnet School theme. This unit would enrich our curriculum. This is an area which is new, exciting and certainly needs exploring.

Learning the criminal justice system will give students an opportunity to understand people's rights and responsibilities. This unit will provide our students with a great opportunity to discuss real issues.

The proposal will allow students, through their reading class, to learn more about American democracy, which is a part of their Social Studies curriculum.

This is an excellent opportunity for our students. We have limited resources and I welcome new and exciting projects.

An excellent resource for Connecticut Academic Performance Test. Sounds great. I think it is a great idea for math and science to support each other.

Our school integrates science into all curricular areas. This proposal fits well into our school focus.

There is a dearth of material for students on this topic; and refining their reading skills is what our students need to do, along with developing their writing skills.

This is a new approach to teaching math. I'm quite excited about its implementation. Our students benefit from hands-on assignments. This unit, although challenging to teach, will prove to be rewarding.

The applicant is an innovative, energized teacher, in search of ways to connect literature and writing to her student audience. This endeavor could give her a context in which to relate literature and writing to her students' lives.

"Learning the criminal justice system will give students an opportunity to understand people's rights and responsibilities. This unit will provide our students with a great opportunity to discuss real issues."

—School Principal

"This is a new approach to teaching math. I'm quite excited about its implementation."

—School Principal

This unit will allow for the infusion of social studies into the drama and dance curriculum. It will be very meaningful and relevant given our student population. It will also lend itself well to an interdisciplinary study of the Spanish culture and history.

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 a liaison 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.
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.
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.

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7. To attend and come prepared to weekly committee meetings with the Director (beginning March 8) 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 2 to conduct a first reading and discussion of the applications to their respective seminars. They then contacted all teachers whose applications needed to be clarified or amplified. On February 9 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 March 2 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 22 the Institute accepted as Fellows 62 New Haven teachers, 33 in the humanities and 29 in the sciences. Two teams of teachers were 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, 23 (or 32 percent) of the teachers accepted in 2000 were participating in the Institute for the first time. Of these first-time Fellows, 15 were in the humanities and 8 were in the sciences. Nearly one third of all the Fellows accepted (31 percent) were Black, about three fifths (62 percent) were White, and 8 percent were Hispanic.

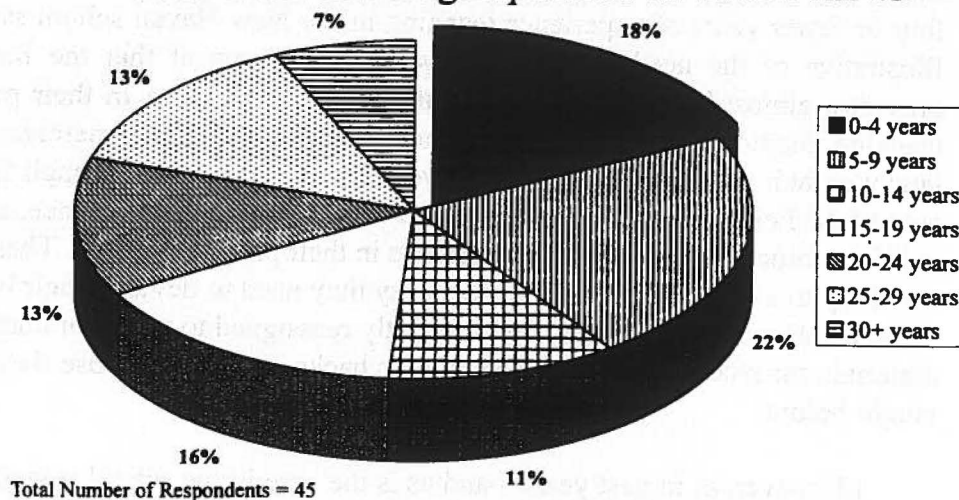
The Fellows Who Were Accepted

Fellows came from 7 of the 8 high schools, 7 of the 9 middle schools and K-8 schools, and 1 of the 5 transitional schools. Of the 27 elementary schools, 8 had teachers participating. The Institute first admitted elementary school teachers in 1990; this year 14 (23 percent) of all Fellows were elementary school teachers. Forty-two percent were middle or K-8 school teachers, and 29 percent were high school teachers. Three schools had five or more Fellows; nine schools had three or more. Overall, about 37 percent of the Fellows were 41-50 years old; 32 percent were younger and 32 percent were older.

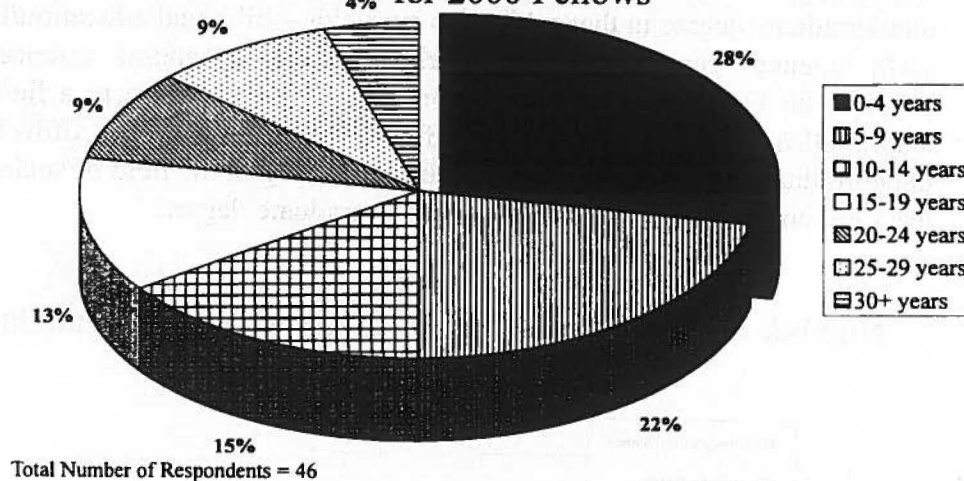
As Chart 2 shows, about one fifth of the Fellows (20 percent) had four or fewer years of total experience in teaching. The Institute attracted a somewhat

Chart 2

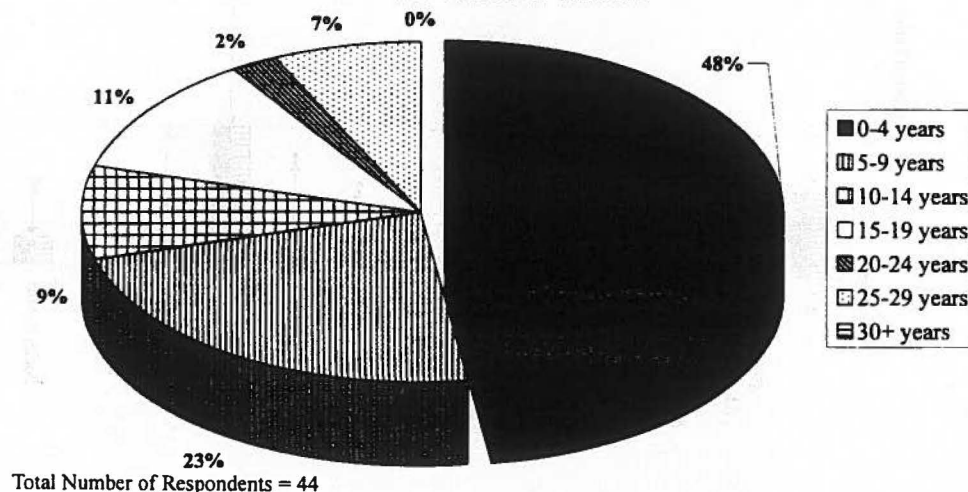
Total Years Teaching Experience for 2000 Fellows



Total Years Teaching Experience in New Haven for 2000 Fellows



Total Years Teaching Experience in Present Position for 2000 Fellows

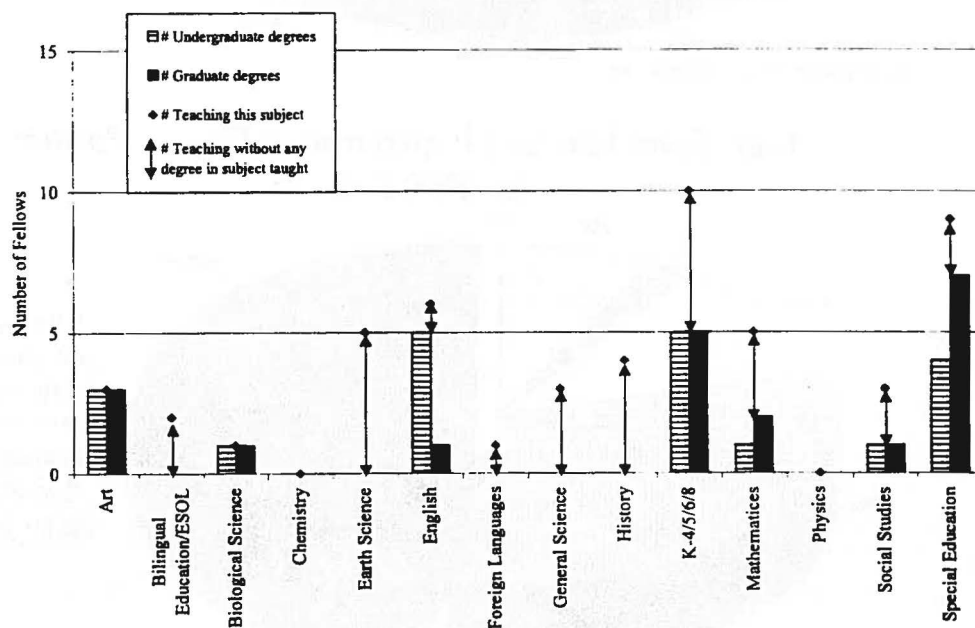


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higher proportion (33 percent) of teachers with 20 or more years of total experience in teaching. Nearly one third (30 percent) of the Fellows, however, had four or fewer years of experience teaching in the New Haven school system. Illustrative of the need for the professional development that the Institute provides, almost half (49 percent) of all Fellows have been in their present teaching position four or fewer years; nearly three quarters (71 percent) have taught in their present position for nine years or less. Thus, even though 59 percent of the Fellows have 10 or more years of total teaching experience, almost half have four or fewer years of experience in their present position. These figures help to explain why many teachers say they need to develop their knowledge in subjects that they have been recently reassigned to teach, or curricular materials for students of a different age or background from those they have taught before.

Moreover, as in past years—and as is the case in the school system generally—many of the 2000 Fellows did not major in college or graduate school in the subjects they currently teach. As Chart 3 shows, in no fields except art and biological science did all Fellows teaching a subject have a graduate or undergraduate degree in that subject. In six fields—bilingual education/ESOL, earth science, general science, foreign language, general science, and history—no Fellows had a graduate or undergraduate degree in a field they taught. Of the Fellows teaching in the field of English, only four fifths had an undergraduate or graduate degree. Of those teaching in the field of social studies, only one third had so much as an undergraduate degree.

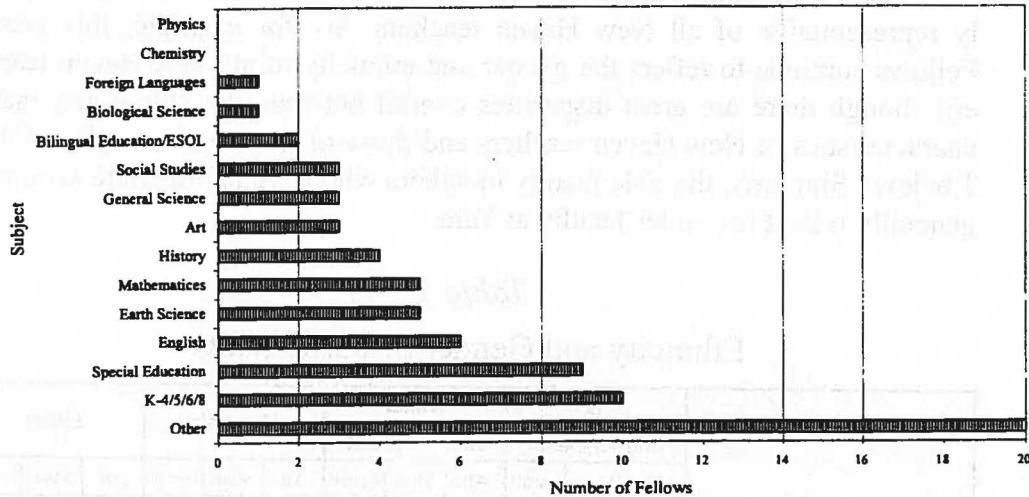
Chart 3
Number of Fellows with Degree in a Subject They Taught in
1999-2000



Annual Report: The Fellows Who Were Accepted

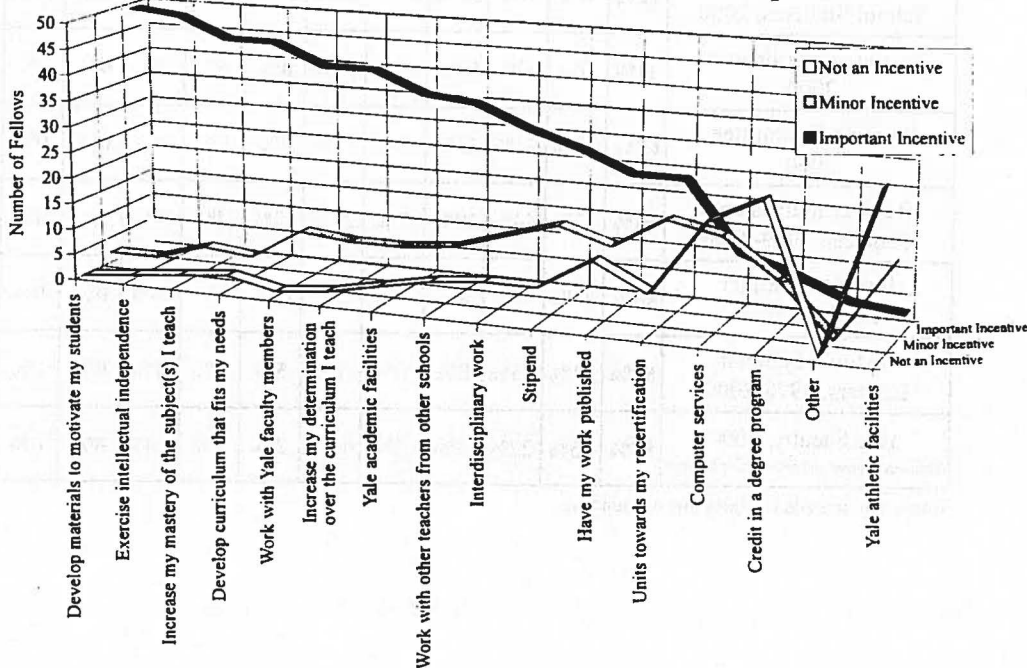
Chart 4 shows the subjects Fellows taught in the 1999-2000 year of their Institute participation. Overall, more than half (53 percent) of Fellows in the humanities and almost three quarters (71 percent) of Fellows in the sciences had not majored either in college or in graduate school in one or more of the subjects they taught in that year.

Chart 4
Subject Taught by 2000 Fellows



Understandably, therefore, when the 2000 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

Chart 5
Incentives for 2000 Fellows to Participate



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the most important incentives were the opportunities to develop materials to motivate their students (96 percent), to develop curricula to fit their needs (94 percent), to increase their mastery in the subjects they teach (86 percent), and to exercise intellectual independence (86 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 much less important for Fellows in the Teachers Institute.

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

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 below.) Similarly, the Yale faculty members who have led Institute seminars generally reflect the wider faculty at Yale.

Table 1

Ethnicity and Gender of Participants

	White			Black			Hispanic			Other		
	non-Hispanic			non-Hispanic								
	All	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female
Institute Fellows, 2000	62%	10%	52%	31%	8%	23%	8%	4%	4%	0%	0%	0%
Institute Fellows, 1978-2000	64%	19%	45%	26%	6%	20%	4%	1%	3%	1%	0%	1%
New Haven Public School Teachers, 2000	72%	21%	51%	19%	4%	15%	8%	2%	7%	1%	0.3%	0.7%
New Haven Public School Students, 2000	12%	6%	6%	57%	30%	28%	29%	15%	14%	2%	0.8%	0.7%
Institute Coordinators, 2000	43%	0%	43%	57%	0%	57%	0%	0%	0%	0%	0%	0%
Steering Committee, 2000	67%	33%	33%	33%	0%	33%	0%	0%	0%	0%	0%	0%
Representatives and Contacts, 1999-2000	56%	12%	44%	28%	7%	21%	12%	4%	9%	2%	0%	2%
Institute Seminar Leaders, 2000	86%	86%	0%	0%	0%	0%	14%	0%	14%	0%	0%	0%
Institute Seminar Leaders, 1978-2000	84%	71%	13%	8%	6%	1%	5%	3%	3%	0%	0%	0%
Yale Faculty, 2000 (includes tenured and term ladder faculty)	87%	65%	22%	3%	2%	0.8%	2%	1%	0.4%	8%	6%	2%

Totals may not add to 100% due to rounding.

Activities for Fellows

At the first organizational meeting of each seminar, held on March 7, 2000, 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 seminar leader provided many resources in class and for further research. He provided several annotated bibliographies that were very useful. He was always available for questions, comments and complaints. If he couldn't answer something, he would follow through and find the answer. He always treated us as professionals, without stodginess or pretension." Another wrote, "I will be able to make use of some of the materials that were provided in the classroom in 2000-2001." A third said, "I was given very interesting reading assignments that made me want to search for more information about the subject."

Some Fellows emphasized how demanding they found the work to be. One said, "Unfortunately, I didn't keep up too much with my reading (I read the whole book too fast and the copies of the cases not at all). I learned the value of keeping up with graduate work." Another said, "Figuring out how to draw upon the seminar materials for a unit for elementary school students was challenging but finally possible." And a third Fellow said, "I was recruited at the last minute by my school representative during a faculty meeting. Other teachers tried to discourage me, claiming that it was too much work. I was willing to take on a new challenge. I have no regrets. This was the most beneficial experience of my life."

The seminar leaders also commented on what they perceived to be the Fellows' responses to the weekly readings. One said:

My expectation was that the Fellows would have a background in science and an interest in building on this background. I was surprised to find that only one of the Fellows had a science degree and that most had a very rudimentary understanding of chemistry. I probably was overly ambitious going into the seminar and had to scale back on the amount I covered and the level.

"The seminar leader provided many resources in class and for further research. . . . He always treated us as professionals, without stodginess or pretension."

—Institute Fellow

"I was willing to take on a new challenge. I have no regrets. This was the most beneficial experience of my life."

—Institute Fellow

"I did not fully anticipate. . .the great enthusiasm for literature that the teachers brought with them. . . . They greatly desired to learn how to read a poem, or how to read a novel, or how to read a story."

—Seminar Leader

Another said:

Prior to this year's program I anticipated that the teachers would be most interested in developing materials for their classrooms and in developing their own skills in reading literature and writing about it. I did not fully anticipate, however, the great enthusiasm for literature that the teachers brought with them. They had little if any training in the formal study of literature, and they greatly desired to learn how to read a poem, or how to read a novel, or how to read a story.

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 (92 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 11, Fellows submitted this prospectus, presented their revised unit topics, and began to discuss the common readings. The regular weekly seminar meetings began on May 9; thereafter Fellows continued to develop their units in stages, with a first draft submitted on May 23. The weekly meetings of the seminars continued through July 18, with Fellows submitting the second draft of their units on July 5 and their completed units by July 31.

For several years, Fellows have been asked to submit the prospectus, together with a revised topic of the unit and a list of appropriate readings, at the time of the second seminar meeting. This allows them a full six weeks to write a first draft. The due date for the second draft is late enough to allow Fellows ample time to address the comments they received on the first draft 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 2000, 73 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: "I can unhesitatingly say that I worked harder on this curriculum unit than I ever have. It was a very ambitious undertaking, and the seminar leader, through comments and

overall guidance, helped me to refine it. Of course, as I teach this year I will continue to fine-tune it." Another wrote: "We were required to present our prospectus as well as the first draft of our individual unit. In this way we were able to get feedback from other members of the group, be it positive or negative." A third wrote, "We had a diverse group of individuals who freely exchanged their opinions in a professional manner. They were always willing to give constructive criticism on the units in progress." At the conclusion of the seminars, most Fellows indicated that the program schedule (86 percent) and the guidelines for writing a unit (98 percent) had been useful to them to a great or moderate extent.

This year 71 percent of the Fellows said they tried out the subject matter and 71 percent said they tried out the strategies of their units in their classroom. Of those Fellows who did, most (85 percent) said that this influenced what they included in the final units.

During the first two months of the program, which serve as a reading period, all Fellows also met together on Tuesday afternoons for a series of talks. These talks are designed to expose all Fellows to some of the work done in seminars other than their own, and to subjects and leaders of possible future seminars. Ordinarily, therefore, 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. The talks given in 2000 were: "Architectural Acoustics: Art or Science?" by Robert E. Apfel, Robert Higgin Professor of Mechanical Engineering; "Foundations of the Criminal Law," by Ian Shapiro, Professor and Chair of Political Science; "New Perspectives on Early Hominid Evolution," by Elisabeth S. Vrba, Professor of Geology and Geophysics, Paleontology, and Osteology; and "To Conserve a Legacy: American Art from Historically-Black Colleges and Universities—Forging a Partnership," by Jock Reynolds III, Henry J. Heinz II Director of the Yale Art Gallery.

Although the talks have recently met with more favorable response than was once the case, they remain somewhat controversial. One Fellow wrote: "I did not find the lectures to be very interesting. I would have preferred a lecture series devoted to my particular seminar. The series certainly did not create a sense of collegiality and common purpose among Fellows." Another Fellow did "appreciate the exposure to new things" but found "one or two of the talks boring because I was not interested in (and could not follow) the topics." A third Fellow wrote, "Until or unless the talks are optional, I will not participate in the Institute again." A fourth wrote: "I would like to see the talks redesigned in some way so that they are more connected to some of the class-room challenges in the New Haven Public Schools."

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 (92 percent) and a sense of collegiality and

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common purpose among Fellows (80 percent). Three quarters (75 percent) said the talks were successful to a great or moderate extent in providing an overview of Fellows' work in the seminars. The same proportion (76 percent) also said that the Institute scheduled the right number of talks. One Fellow wrote: "The talks covered a wide variety of topics that were of great interest to teachers in the school system. They allowed me to gain insight into many topics that I felt would be of interest to me in future years."

Many Fellows reported that the talks prompted them to read about their topics (50 percent), discuss the topics with their students (56 percent), and discuss the talks with other teachers (76 percent).

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 in recent years, the Institute scheduled a session on curriculum unit writing on March 21, 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 mechanical 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 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 on-line, 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.

Almost all Fellows agreed that the Coordinator had provided teacher leadership without diminishing the collegial rapport within the seminar.

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 (92 percent) agreed that the Coordinator had provided teacher leadership without diminishing the collegial rapport within the seminar. Most Fellows said that the Coordinators were helpful either a lot (56 percent) or a little (36 percent) in facilitating discussion of Fellows' work

in progress; helpful either a lot (76 percent) or a little (18 percent) in providing information about guidelines and deadlines for unit writing; and helpful either a lot (71 percent) or a little (24 percent) in providing information about the use of University facilities. 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. Again this year their comments were often very enthusiastic indeed. One said:

The strength of the Institute is bringing teachers from all over New Haven to experience a single purpose—the creation of teaching units for the benefit of the students. Being new to teaching and the system, it was very beneficial getting to know my colleagues. They helped me think through things with their input into my unit and ideas. The combination of elementary and secondary education teachers really let me get an idea of what everyone expects from each other. I liked the heterogeneous groupings: I got to work in a very diverse group.

Another said:

The Institute provides a critical component to urban educators, many of whom are trying their best to bring quality education to the students of New Haven. Often when we are “in the trenches” we grow weary, and we cast about for sources of inspiration and creative stimulation. The Institute is such a source. This is my third consecutive year participating in the Institute, and I have fully enjoyed all three. I am a better teacher because of my participation in the Institute.

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

Each week we read different texts, beginning discussion with a review of the principal features of the previous week's study. Generally I proposed at the outset of class an agenda for the session, and then we proceeded with this agenda. We made some

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—Institute Fellow

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changes in the syllabus along the way. The teachers requested the addition of texts by authors they particularly liked, so we did this and we cut two texts from the original syllabus. Our course became custom-made. We spent a part of two sessions discussing the curriculum units of teachers, once in an early session, and once again as we approached the conclusion.

Another said:

I had mostly first-time seminar participants this time, so I thought I'd need to spend more time explaining just what the Institute's expectations are. That indeed proved to be the case, but no one showed any difficulty comprehending what was expected or unwillingness to comply. The seminar discussions were generally quite good. They included more digressions than I'd permit in a Yale seminar, as in the past, but these helped build up rapport among all involved and often ended up raising pertinent issues in unexpected and valuable ways. I thought that by the end everyone had quite positive reactions to the seminar experience, though some of the new participants did find writing the unit much more work than they had anticipated.

A third seminar leader said:

The greatest challenge for me—this summer as in past summers—was to reconcile their very different writing and learning styles. In class, they all tend to speak with (relatively) equal insight and clarity. But in their writing, they reveal vast differences in educational skills and background. I find myself exhilarated by the best writers and disheartened by the modest skills of the less capable Fellows.

And a fourth said:

First and foremost, this was a good experience for me and also, I believe, for the Fellows. We both learned a lot from each other. Some of the new material I prepared for the seminar can be used in my Yale courses. One difficulty was produced by the fact that the Fellows came from elementary, middle and high school. This is a very broad range to target the seminar sessions. I accomplished the task, though perhaps unevenly, by appealing to experiential activity (demonstrations and hands-on experimentation).

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: "Cultural diversity in New Haven is often only African American diversity. The opportunity and ability to

teach about Hispanic culture will widen curricula and perspectives in important ways." Another Fellow wrote:

The lessons in this unit will help students understand the process of identifying Spanish-speaking Americans and of promoting a better understanding of the cultures within that group. Students will learn about the issues surrounding Puerto Rican identity. The lessons will show students how ethnic labels were created in the U.S. to refer to Spanish-speaking peoples.

A third Fellow wrote:

I believe I now have the tools to teach about Caribbean culture from a woman's perspective. Their feminism has been affected by Spanish colonial powers that controlled their culture. But their culture was also affected by the indigenous people and the Africans brought in as slaves.

A fourth Fellow wrote:

The unit I developed will allow my students the opportunity to use the Harlem Renaissance as a backdrop to develop the concentration portion of their advanced placement portfolios. This unit will also allow them the opportunity to explore and study an area of African American art they are not familiar with.

And a fifth Fellow wrote:

The Institute and my curriculum will help my own classes in many ways. One third of our student population is Latino, and only a very small percentage of the literature taught is written by Latinos. I will help my students learn their heritage and learn that they have a rich culture of literature and art. I teach American Literature and the one component I was weak on was Latino literature.

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. One Fellow wrote: "I was fortunate to meet teachers from other schools and grade levels who had interests similar to mine. We shared ideas and helped each other find resources that helped us improve our units."

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

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—Institute Fellow

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"Therefore the seminar should be an example itself. If it is well taught, on this subject, then the teachers develop a sense of how they might do some version of this themselves."

—Seminar Leader

"He modeled what a teacher should be. This was a lesson in itself."

—Institute Fellow

illustrated by the mutual respect between Fellows and seminar leaders that the seminar experience engenders. One seminar leader, for example, said:

The teachers want to learn about a subject and they also want to learn how to teach the subject. Therefore the seminar should be an example itself. If it is well taught, on this subject, then the teachers develop a sense of how they might do some version of this themselves.

In turn, Fellows expressed their respect for their Yale colleagues:

Our seminar leader was infinitely patient and understanding when it came to our questions and our needs. He modeled what a teacher should be. This was a lesson in itself.

Our seminar leader was always available for questions, comments, and complaints. If he couldn't answer something, he would follow through and find the answer. He always treated us as professionals, without stodginess or pretension. He stimulated our imaginations, guided our discussions, and kept our comments focused and topical. He is very supportive and kind.

The seminar leader was very helpful in the process of completing the unit. He was always available and gave very helpful suggestions. He helped to pace the class by frequently questioning our progress, making suggestions, and providing materials to help over rough spots. He never tired of the many questions asked but responded in a positive, helpful manner.

I arrived at the seminar sometimes quite early, which afforded me the opportunity to converse with the seminar leader. We talked about the readings, my unit, current affairs, and our own personal experiences with related topics. This was my favorite time. I got to sort out my own ideas verbally and listen to his ideas in a very casual setting.

Relating Seminar Topics to Curriculum Units

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.

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—including a strong emphasis upon literacy—and the state Mastery and Academic Performance Tests. As one Fellow put it:

In addition to participating in the activities about another culture, my unit proposes to reinforce the reading and writing skills of my children, along with critical analysis of the reading assigned in class. These skills are necessary in order to prepare children to become life-long learners and productive citizens in our society.

Another Fellow said:

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. With these issues in mind, I have designed my unit to offer both an analytical and aesthetic approach to the topic. I feel that the unit I have written will offer students a variety of approaches to this topic through science and creative dramatics. The unit also fits with our school plan with regard to its interdisciplinary focus.

Yet another Fellow said that the seminar “led me to create a standards-driven curriculum designed to greatly improve students’ performance.” The various strategies for incorporating such elements in what may be quite individual and innovative units often provided stimulating discussion among the Fellows. Comments by other Fellows on this matter include these:

My teaching will benefit from a fresh approach to teaching literacy skills. My unit is aligned with the standards of the New Haven School District for 8th grade in the teaching of reading, writing, and speaking.

I know that the unit will be in keeping with the New Haven Schools curriculum. For third graders facing the Connecticut Mastery Test, these skills cannot be overemphasized.

I believe that my unit follows the modern approach of aligning lessons with the standards of the City of New Haven. I will use

In recent years the Institute has encouraged Fellows to build into their curriculum units both subject matter and skills that are called for by the local curriculum framework—including a strong emphasis upon literacy—and the state Mastery and Academic Performance Tests.

“[The seminar] led me to create a standards-driven curriculum designed to greatly improve students’ performance.”

—Institute Fellow

this approach in designing future lessons. Also, my unit can be used as an example for other teachers who may have questions about alignment.

"My curriculum unit addresses a dozen of the National Standards for Theatre."

—Institute Fellow

My curriculum unit addresses a dozen of the National Standards for Theatre. It will take about a month to teach, and will provide opportunities for acting students to develop their skills in improvisational acting, research, essay writing, script writing, rehearsal and performance.

In the end, a sizable majority of this year's Fellows (88 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: "Ample time was given to every one to discuss their curriculum units and get feed back from other members in the seminar." Another said, "The time spent in the sessions discussing works-in-progress was valuable to my understanding of the topic and of the Yale writing process. That time also allowed me to get the input of fellow teachers toward strategies for teaching and learning styles."

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 1,298 units contained in the 143 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 143 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 the Participants

As in past years, Fellows in 2000 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 (86 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 two Fellows 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:

This seminar has inspired me to extend my present knowledge and read more literature. I have also grown both personally and professionally.

I cherish the opportunity to work with other motivated teachers and also to work with Yale faculty. When I teach, I try so hard to get the students' thinking levels up to mine, but never challenge my own thinking level, so to speak. But during the sessions I was challenged, and I grew as a person and as a scholar. My own level of thinking was raised, and my understanding of my subject matter was enhanced. The classes also recharged my motivation for teaching, especially at the end of the year when I get so tired.

Because of my participation in the Institute, I am able to bring new ideas and fresh enthusiasm to my teaching. To my students I bring a new interdisciplinary unit specially designed for them which includes effective strategies and a variety of activities that I feel will prove to be highly motivating for them.

I feel that the Institute is making a big difference in many teachers' lives. The help that so many teachers said that they are receiving is helping them to be more effective at the school level as it relates to the school's Comprehensive School plan. Teachers are helping students to achieve the necessary literacy skills to improve their learning. Staff members are helping one another to pool their resources and talents.

The Institute has maintained its strength in providing teachers with seminars that have helped them grow socially, emotionally and intellectually.

Fellows spoke, too, of the access to Yale facilities they had gained from participation. From the Institute's inception, all Fellows have been full mem-

"To my students I bring a new interdisciplinary unit specially designed for them which includes effective strategies and a variety of activities that I feel will prove to be highly motivating for them."

—Institute Fellow

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bers 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 58 percent reported that membership in the Yale community had been greatly or moderately useful to them. One Fellow said: "I value the opportunity to use Yale's libraries and plan to do so throughout the year." Another said: "I am especially glad to be able to access Yale books and the stacks, but also love using the computers to access websites that would normally be off-limits to me."

Almost all of them said that they plan to encourage or assist other teachers in using the unit they prepared; two thirds said they planned to do so with three or more other teachers.

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. Almost all of them said that they plan to encourage or assist other teachers in using the unit they prepared; two thirds said they planned to do so with three or more other teachers. As a group, the Fellows planned to encourage or assist a total of 204 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:

My last experience with the Institute was in 1995. The unit was a cross-curriculum unit that involved teachers of several disciplines. Soon after writing the unit I became a Magnet School Resource Teacher. The experience of writing the unit helped me a great deal in preparing cross-curriculum units dealing with our Magnet School theme.

Although I have not been a part of a team effort in this year's seminar, having another member from our teaching staff from my school attending the seminar was helpful with discussion in our school and has motivated us to collaborate with our units this coming school term.

I find the 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. After six years of participating in this Institute, I find that it is only going better.

I feel I have written a unit that the students can relate to and will find interesting. I also feel that in a more creative manner it meets and reinforces the curriculum standards developed by the district. I hope to interest a few other teachers in sharing some of the material and lessons I plan to use. I also hope that though we do not have an official team some sort of culminating event will grow from my unit and one written by another teacher in the same seminar.

My school does not have any art classes. I am very excited to add an art component into my classes. I will also be able to affect change in the school curriculum. I have discussed my unit with one of the American history teachers, and she and I will be team-teaching a unit on Latino immigration.

No one in my school has attempted to teach the information I covered. In conducting an informal survey of students and teachers to find out what they know about my topic, I found there was definitely a need for this unit, and I did generate interest in the questions that I asked. I think the students and teachers will be quite receptive to instituting it. In my department it will become a curriculum requirement since I do have control over what is taught in the department.

My school's curriculum needs to be infused with reading material and lessons that engender critical and analytical thought. It needs to be more inclusive and reflective of the population it serves. When that change comes about, student interest will increase. My curriculum unit will help by providing some alternatives to what is currently in place.

The effect my curriculum unit and Institute participation will have on the school will be positive. My unit will be planned as a part of the school's Comprehensive School Plan. 7th grade science and social development teachers will be made aware of it. It will be a school strategy to use the unit to meet the District's Science Standard 5.0 which deals with technology, health care and other relevant issues in science.

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 Fellows' professional lives. Both groups cite their own rewards. One first-time Fellow wrote:

Initially, as a favor to the previous Representative, I agreed to assume those responsibilities, and I came into the Institute as a Fellow entirely by default. My experience in the New Haven Public Schools for the past five years had reinforced in me Groucho Marx's sentiments of "never joining any clubs or organizations" This unfortunately had also become my mantra, especially if it had anything to do with the school system outside of contractual obligations. The disunity, lack of respect, and overall disrespect for teachers weighed heavily on my heart. I had even occasionally interviewed for positions nearer to my home

"The Institute has provided me with a wide array of learning opportunities to upgrade my skills, explore areas of personal growth, interact with diverse New Haven Public Schools faculty and Yale faculty."

—Institute Fellow

along the shoreline (only to feel that same void when offered a position). My expectations for the Institute were minimal. I expected to fulfill my duties for the academic year and be done with it. Obviously, things did not quite turn out as I expected! The Institute has provided me with a wide array of learning opportunities to upgrade my skills, explore areas of personal growth, interact with diverse New Haven Public Schools faculty and Yale faculty. These associations have strengthened the educational possibilities for all my students as I have grown. All the things I wished for in my district were actively articulated and demonstrated in the Institute. Finally, I had found COLLEGIALITY!

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

I developed other teaching units that were modeled around my first unit. I found my students enjoyed the units because I made them more comparative of one another. August Wilson was used to compare his plays and characters and time periods. The students got into a history of the plays. I found the comprehension and retention of all the students dramatically improved. This is just an example.

Every year since 1990, when they became a regular part of the Institute, elementary school teachers have spoken of the advantages of the Institute for them specifically. This year one such Fellow said: "Though there were only two elementary teachers in my seminar, I felt the discussion was often pertinent to teaching in an elementary school." Another, who has returned year after year, said:

The units that I and others in my school have written and taught have always been refreshing, positive vehicles for learning within our classrooms. Since we usually engage in team activities, we are able to affect more pupils than those who are in our classrooms. We also find that this team approach and the culminating activity that is always a part of it serve to involve other teachers, administrators, parents, and other staff members.

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. One seminar leader this year said:

I think that the single most tangible benefit for Yale faculty teaching in the Teachers Institute is the direct, hands-on involvement with the New Haven public school system. It is very important for the University community to maintain close ties with the New Haven community, and nowhere more than in the educational arena. I feel that I understand the problems and opportunities of inner city teaching far better than I otherwise would because of my opportunities to teach in the Institute. As a result, I find myself motivated in ways that I might not otherwise be to work for educational improvement in the local school system.

"I feel that I understand the problems and opportunities of inner city teaching far better than I otherwise would because of my opportunities to teach in the Institute."
—Seminar Leader

Another said:

I probably learned more "content" from this seminar than any other. It was supposed to be about one aspect of its announced subject, but the teachers were more interested in another aspect. So we ended up focusing on that more than I expected, and I learned a great deal, not being to expert in that area. Also, the discussions persuaded me that an idea I'd had in my own writing was indeed right and also applied to other areas. I may well end up exploring these themes in published research as a result of this seminar.

And another said:

I find that my teaching with the Institute helps me to improve as a teacher and allows me a special intellectual freedom. The fellows are adults and I must teach differently and even change my approach to some of the texts we study. This makes me more flexible in the classroom and in my mind.

Teams of Fellows

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

As we have noted, this year a team of Fellows from East Rock Global Magnet School enrolled in the seminar on "Sound and Sensibility: Acoustics in Architecture, Music, and the Environment" and focused their units upon the

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cultures of Brazil and Kenya. They integrated geography, social studies, and music to trace the traditions of those countries and explore the European and African influences upon the emerging culture of Brazil.

Benefits for Students

The ultimate purpose of the Institute is to strengthen teaching in New Haven's public schools and in this way to improve student learning throughout the schools. Contrary to what some would expect of a partnership involving Yale University, the Teachers Institute intends to serve students at all achievement and performance levels. Fellows often, in fact, write their units for students at more than one level. While most Fellows (86 percent) reported that their new curriculum units were designed for their "average" students, more than half (69 percent) reported that they were designed for their "advanced" students and more than half (63 percent) also reported that they were designed for their "least advanced" students.

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

This unit will provide a tool by which I can help my students improve their literacy. I plan to use it in small group settings with all my reading groups, making necessary adjustments as we go.

This unit will enhance my school's comprehensive school-wide curriculum by combining three subject areas in one teachable unit: Language Arts, Social Studies, and Foreign Language.

My unit is a preliminary look at new medical technologies and the public debate that surrounds them. The topic offers appeal to any teacher or student who is in search of a current events unit, or one on constitutional law and debate. I see it as an opportunity to look beyond a history or science textbook and investigate non-print media for a look at what promises to become a part of our immediate future.

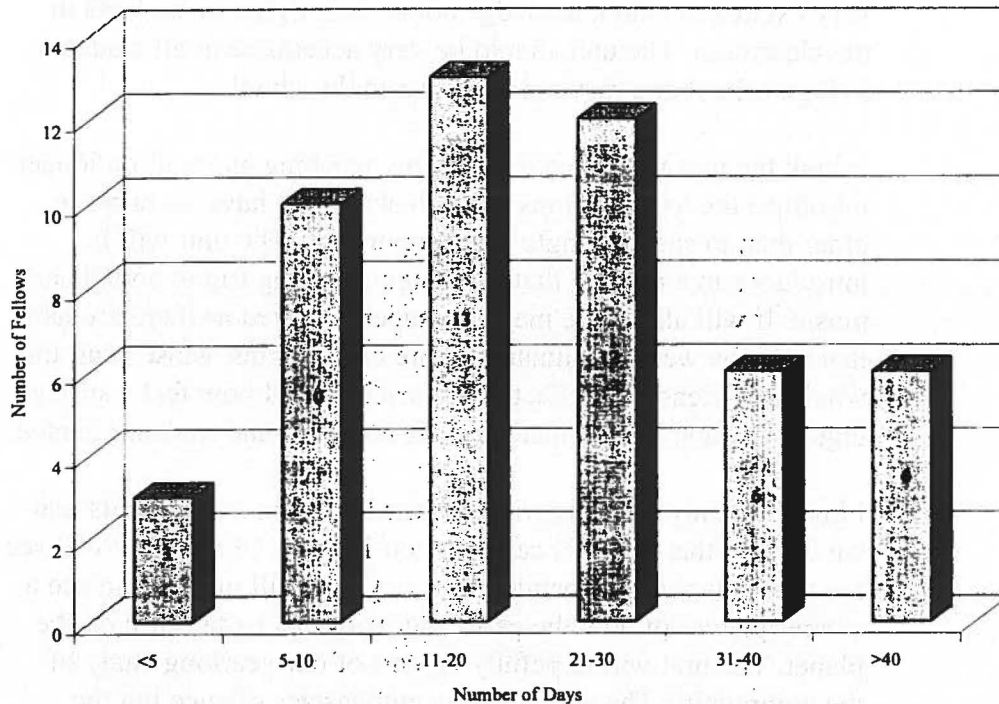
I am confident that the curriculum I have written and plan to team-teach this year will fire up my students, in part because I am fired up. They know almost nothing about the Harlem Renaissance, and when they engage in the hands-on art activities I have planned, when they research the Harlem Renaissance on the Internet, and when they prepare for "Harlem Renaissance Night" at our school, they should have strong associations with this phenomenon. I hope that the unit will intrigue the two social studies teachers in my program, and that they will approach it from a historical and sociological perspective. Approximately half of our student body will be studying this curriculum, and there will be

visible signs of our art activities, in prominent places. It will no doubt have a positive impact on the student body in our program.

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. Sixty-two of the Fellows planned to teach their unit to 25 or more students; 24 of that group said that they would teach their unit to 60 or more students. The total number of students to be taught a unit by this year's Fellows is 2,888. 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.

Chart 6

Number of Days 2000 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. Almost all of the Fellows responding agreed that, as a result of Institute participation, they have a higher expectation of their students' ability to learn about the seminar subject. More than half of the Fellows (54 percent) strongly agreed with that conclusion. We have already quoted some Fellows who spoke about how their own enthusiasm for a subject would motivate students, and how they planned to involve students more actively in classroom learning. Others said:

The topic, "Constitutional Privacy in the Twenty-first Century," was one of great interest to me. It is a great topic to use with young people because so many of its components directly affect

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the lives of young people. For instance, my school system is approximately 60% African American and 30% Hispanic/Latino. These are the individuals most impacted by illegal searches and police stops due to profiling. This population will be brutalized and incarcerated disproportionately by those who take oaths to protect and serve. This curriculum is very timely for them and relevant to them.

"I wrote the unit with the idea that there are few resources for teachers to adequately teach the students how to attack the Interdisciplinary portion of CAPT."

—Institute Fellow

I wrote the unit with the idea that there are few resources for teachers to adequately teach the students how to attack the Interdisciplinary portion of CAPT. The unit has students researching, debating, and writing about the topic of privacy in the classroom. It also gives teachers a glimpse in to a unique writing program, John Collins' method, which can be focused on the three areas students need to excel in to pass the test. Students should be very excited to gain knowledge about their rights as students in the classroom. The unit should be very accessible to all students in high school and maybe in upper middle school.

I think the unit will directly affect my teaching as I will no longer introduce the trig functions as math skills that have no purpose other than to show triangle side proportions. The unit will be introduced in a method that is engaging—tying trig to sound and music. It will also force me to be super prepared as there are labs that must be well coordinated before class begins. Most of all the whole experience has affected my teaching as I now feel a stronger urge to develop lessons that are more engaging and student-oriented.

I know that my students will love the hands-on experiments that we did and that this will capture their interest. I hope they will see the usual plant unit expanded in a way that will make them see a clearer picture of how the earth and its cycles sustain life on the planet. The unit will hopefully be part of our yearlong study of the community. The unit not only emphasizes science but the responsibility of all people to make sure good decisions are made about the environment.

The integration of both hands-on activities and lectures has again convinced me that this is the way to go in the classroom. As a result of the way in which the seminar leader presented his subject matter, I intend to set up a center where the children can go and experiment with plants and photosynthesis. The experiments they perform will integrate all subject areas and I imagine a class where the children are truly involved in the learning process.

My unit was on the genetic engineering of crop plants. This is a controversial issue that I think all of my students need to be aware

of at a basic level. I will teach this unit to my advanced classes, and will teach some of it to all of my classes. It will become part of my unit on genetics and evolution. I hope it will awaken awareness in my students of the ethical problems involved with genetic engineering.

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 Fellow said:

Last year I wrote a curriculum about mothers represented in short stories by women, and my colleague wrote a curriculum about daughters represented in short stories by women. We team-taught these units and incorporated a hands-on art activity into the unit. The students picked a scene or a character from one of the stories, and they designed and made a fabric square representing the scene or the character. They worked with fabric, ribbon, lace, odd bits, colored pencils, markers, crayons, paints, and colored construction paper. The results were astonishing. Once they had completed each square they added quotes from the story. We mounted the squares on rolls of paper and put them up in the room and out in the hallway. We took photos of the squares in progress and sent the photos home in report cards. In some cases, we noticed that students who had been problematic became more cooperative as they worked on their fabric squares. Students are coming to expect creative arts as part of the units that we design. The response is very positive. This fall, our first unit incorporating hands-on art will touch every student in the school.

Another Fellow said:

I have participated in the Institute for the past three years developing curriculum that I use in my U.S. History survey course. In the summer of 1997 I developed a unit on "Latino Experience in America," concentrating on Puerto Ricans, Mexicans and Cubans. We examined the myths and stereotypes about each of the groups and learned to appreciate the strength of their diversity. We also celebrated what was unique about these groups by studying the music and the food. In 1998 I developed a unit on "The Civil Rights Movement Through Film (1954-1965). Films can bring a lesson to life. They can play a vital role in stirring up the social issues of the past. In viewing a film students can acquire an incredible amount of comprehensive knowledge on a topic. In 1999 I developed a unit on "The Italian American Experience

"Students are coming to expect creative arts as part of the units that we design. . . . This fall, our first unit incorporating hands-on art will touch every student in the school."

—Institute Fellow

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(1880-1920). This unit examined the time period referred to as New Immigration with concentration on what we call the Ellis Island immigrant. We reviewed the procedure at Ellis Island right before I took my classes to New York City to view the Statue of Liberty and Ellis Island.

Another Fellow said:

Last year I developed a curriculum unit that deals with the problems that visually impaired and blind students encounter when they attempt to access Internet sites. This curriculum is important because in the past blind and visually impaired were restricted in accessing information. My students attempted to design a web-site that is more easily accessible. We learned a great deal about web-sites and their formats and how the design may determine whether the web-site can be conveniently accessed by blind persons. We did not have all the software and hardware necessary to completely design our web-site, but this equipment is currently on order and will help next year as we continue our project. I feel that my students gained a great understanding of technology and web page design that will allow us to use technology effectively for handicapped populations.

And another Fellow said:

Each year in which I have participated in the Institute has proven to be a rewarding experience for my students, and our overall school. As a result of my curriculum units, for two consecutive years my class received meritorious honors in the field of Science, winning first place awards in our school and citywide Science Fairs. Our students have been asked to give special presentations at District Headquarters and to have their work displayed at the New Haven Public Library and Gateway Community College, again a result of the implementation of my curriculum units in the area of American Children's Literature and Native American and African Art. The results have proven to be a motivational, academically empowering experience for my young learners, a positive promotional tool for our school, and a reinforcement for parents.

"As a result of my curriculum units, for two consecutive years my class received meritorious honors in the field of Science, winning first place awards in our school and citywide Science Fairs."

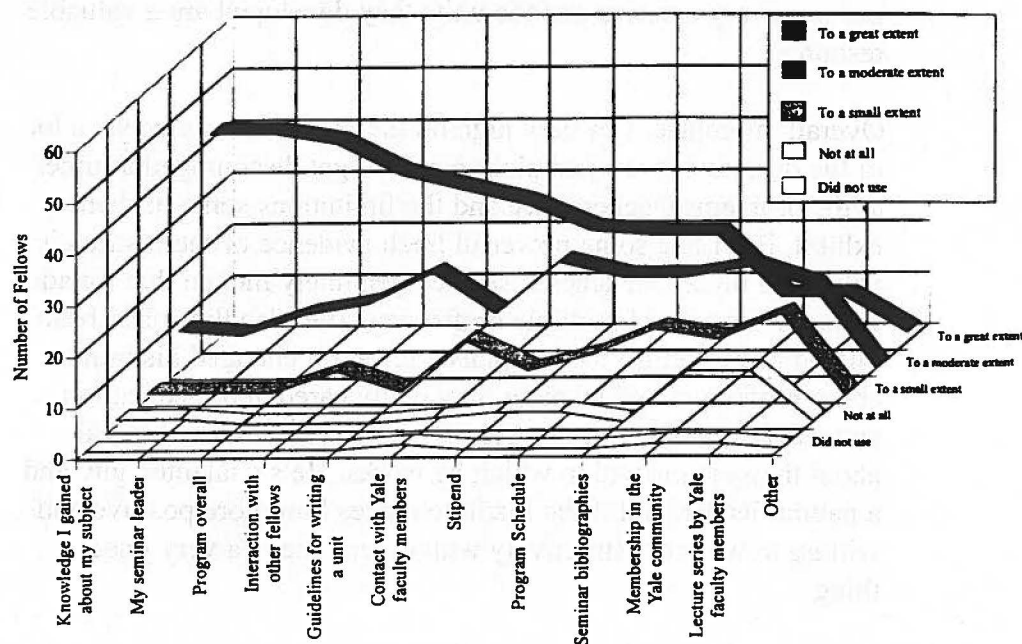
—Institute Fellow

Participants' Conclusions Overall

We asked Fellows about the extent to which several features of the Institute had been useful to them. As shown in Chart 7 (facing page, 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 series of talks and computer assistance, each aspect of the Institute were regarded as useful

Chart 7

Program's Usefulness to the 2000 Fellows



to a great or moderate extent, by three fourths of the Fellows or more. About half (49 percent) responded that favorably to the talks and more than two fifths (44 percent) to computer assistance. (The latter figure is no doubt misleadingly low, since the question did not take into consideration the mandatory assistance that occurs in every instance when the Institute checks the disks on which curriculum units are submitted and offers advice on correcting them.)

We asked seminar leaders to provide their overall conclusions about the strengths and weaknesses of the Institute. Three of them wrote as follows:

The Institute is one of the most rewarding activities at Yale. It is a commitment to learning and to community. It is a source of strength to all who participate. There are occasional tensions and blindness in the relationship between seminar leader and Fellow, between college professor and high school teacher, between the person who works at Yale and the person who works in the New Haven schools. In this tension lies the greatest area of potential weakness: communication. The meetings for the seminar leaders, the coordinators, the Fellows, and the other activities relating to the Institute, all help to create greater communication, and this is essential for the Institute to be successful and to accomplish the objective of improved education for all direct and indirect participants.

Overall, the program of the Institute is excellent. It provides an important contact between Yale and the New Haven school system. Several of the Fellows commented to me that the Institute

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was a primary reason that they are teaching in the New Haven school system. Another major strength of the Institute is the preparation of the curriculum units. The Fellows in the seminar I led were very creative and the units they developed are a valuable resource.

Overall, of course, I'm very high on the Institute. As always, a lot of the discussions are just plain fun. I do get discouraged at times at the problems teachers face and the limitations some of them exhibit. But I had some powerful fresh evidence of the Institute's value this time. One teacher seemed genuinely moved that I made extra efforts to read multiple drafts even after deadlines had been missed and to return them rapidly. He said it changed his mind about professors and whether they really cared about education and teachers at all; and that clearly made him feel less cynical about the systems within which he works. He's a talented guy and a natural leader, and if the Institute makes him more positive and willing to work constructively with others, that's a very good thing.

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

I see no weakness in the Institute. Its strengths are many and that's why it continues to hold such great appeal to me, an enthusiastic participant for six years now. The opportunity to study under a Yale professor in a seminar situation is invaluable to me. It provides me with the chance to explore new topics, exchange ideas with other colleagues, and design a curriculum unit for my students that is relevant to the seminar subject. I enjoyed the readings this year very much as well as the highly stimulating and thought-provoking discussions led by my professor. I have always found the 3-draft system of writing a curriculum unit very helpful, and the deadlines are workable ones. This partnership between Yale University and New Haven teachers is a very important one. Through the Institute, teachers are given the opportunity to grow intellectually and to produce curriculum units that teachers in New Haven and—because of the Internet—those all over the world now have access to.

Another Fellow wrote:

The emphasis our seminar leader gave us in developing our curriculum units helped to create the feeling of openness that is so vital for continuous invention. All of the six colleagues were clearly proud of their work and even more proud of what they would be able to offer their students. Yet, we all readily discussed

how far we needed to go before we would be satisfied. We were able this year to discuss the problems we saw just ahead and probed continuously for new ideas and new contacts to help find solutions.

A third Fellow wrote:

I thoroughly enjoyed my Institute experience this year. I enjoyed the seminar more than the talks because of its focus and small group participation. I found some of the talks very intellectually stimulating, all interesting, but not as related to the overview of the seminar and unit design. The only weakness was not having enough seminar classes before the first and second deadlines of the unit were due. I found the information within the seminar so interesting that I wanted to incorporate some of those ideas into the unit. I eventually did at the second draft stage.

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 (67 percent) or might participate (27 percent) in the Institute in one or more future years. Only two Fellows said they did not intend to participate in the future. One of them is leaving the District; the other felt that the requirements and expected participation in the program were too demanding.

We should add that there are now 38 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 Associate 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 and e-mail provided in this way. Although this option remains available, the Institute now

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emphasizes the assistance it can offer to Fellows in securing Internet access and setting up e-mail with other providers. The Institute has often referred Fellows to the Internet Information Center, which serves the entire Yale community. During the past two years, however, the Institute has 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 on-line, the Representatives had decided that, beginning in 1999, Fellows must submit their curriculum units and guide entries in electronic as well as printed form. 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 to the seminar leader, if she or he chooses to perform this function), who checks them for formatting errors and readability. They are returned with a checklist that indicates any problems. This procedure, which sets the stage for a discussion with the computer assistant, ensures that the final version on disk will be free of those problems.

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 2000 Fellows received computer assistance on a variety of topics, which included getting started with computing, setting up an e-mail account, getting started on the Internet, using the Internet in research and teaching, using Institute resources on-line, and word-processing and file handling for the preparation of curriculum units.

The Institute offered three different types of computer workshop during the spring of 2000. A series of Center Workshops, offered fairly regularly on Wednesdays during the spring term, were geared toward the use of the computers in the Centers for Curriculum and Professional Development. They took place in one of the Yale library electronic classrooms. They were designed to familiarize teachers with the Center computer and introduce them to some of the researching tools available on the Institute web-site and the Yale Research Workstation.

There were also two Fellows Workshops conducted in April. The first workshop was a basic level introduction to file handling, researching, and using e-mail. The second workshop was designed with more computer-literate Fellows in mind. It covered some of the basic researching tools available on the library's Research Workstation. The positive response of the Fellows to the workshops suggests that a continuation of such programs and a more structured integration of workshops into the Fellows' program could be very beneficial.

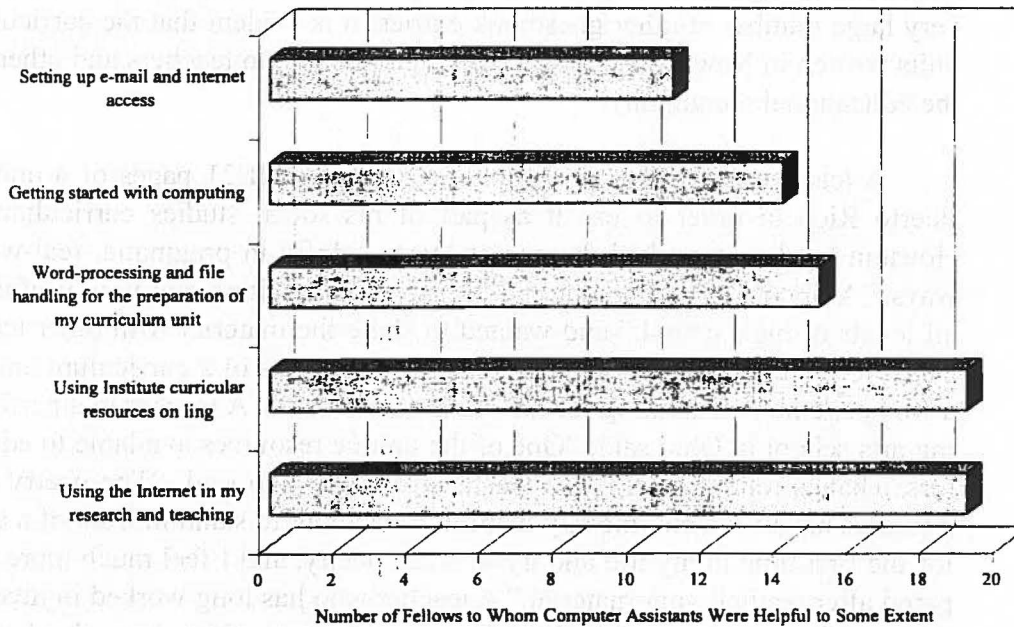
In addition to such Workshops, and in addition to the mandatory assistance provided through the checking of all of the disks on which curriculum units would be submitted, a good number of the Fellows sought additional assistance. Forty-nine percent of the Fellows made use of assistance in person, 20 percent by phone, and 16 percent by e-mail. For 39 of the Fellows (44 per-

cent) the availability of computer services was an incentive to their participation. Most Fellows who did not use the computer assistance said they did not need it because they had previously acquired computer skills, or because they had other resources at home or school. A few said they did not do so because of time constraints during the school year. 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 using the additional computer assistance, 11 found the assistants helpful in setting up e-mail and Internet access; 14 found them helpful in getting started with computing; 15 found them helpful in word processing and file handling for the preparation of a curriculum unit; 19 found them helpful in using the Internet in research and teaching; and 19 found them helpful in using the Institute's curricular resources on-line. (See Chart 8.)

Chart 8

Computer Assistants' Helpfulness to the 2000 Fellows



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 1,298 units written between 1978 and 2000, plus an index and guide to these units, are thus available to teachers on-line. 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-school teachers from both public and private schools (including Fellows from other Teachers Institutes in the National Demonstration Project), school and university administrators, parent volunteers, university professors, high school students, graduate students, librarians, military personnel, home schoolers, local policy-makers, and others conducting research or having an interest in education. We estimate that, from its inauguration in June 1998 through December 2000, the Web-site was visited by 880,000 persons. A marked increase of activity was noted during the last four months of 2000, and it is probable that this increase will continue.

It is evident that the curriculum units written in New Haven have been of great value to teachers and others in the educational community.

In 2000 we heard from educators in the Philippines, Israel, Puerto Rico, India, Canada, Argentina, Hungary, England, Scotland, Egypt, the United Arab Emirates, New Zealand, and Romania. Our site has been linked at their request to a number of other Web-sites, including Diversity Links Database, an Internet instructional resource guide for teachers, and a Charlottesville, Virginia, site for art teachers. Lesson plans from a unit have been included in a Web-site designed for the New York City Board of Education. And from the very large number of other 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.

A teacher in the Bronx, for example, printed all 21 pages of a unit on Puerto Rico in order to use it as part of his social studies curriculum. A Houston teacher described the site as "very helpful in pragmatic, real-world ways." A librarian in Illinois found the material "exciting and very useful for all levels of high school," and wanted to share the material with other teachers. A teacher from New York State included excerpts of a curriculum unit on a web page he was creating for his 9th-grade students. A teacher in a performing arts school in Ohio said: "One of the unique resources available to educators. Thanks for your help!!" A teacher from Chicago said: "The poetry curriculums have been enormously helpful. I am about to stand in front of a class for the first time in my life and try to teach poetry, and I feel much more prepared after reading your material." A teacher who has long worked in juvenile reintegration centers gave high praise to a unit on teaching juveniles how to plan for the future. A teacher in Kentucky said: "I think the concept is wonderful. I am teaching arts and humanities at a middle school with an emphasis on drama, art and movement, with no curriculum." An experienced teacher in Colorado, who also teaches re-certification courses, found the web site "helpful in preparing for new teaching assignments within my English/language arts department." A teacher in Virginia said: "Many times on the inter-net the information for educators is sketchy and very general. I appreciate the opportunity to log onto this site and increase my professional knowledge as well as to enrich curriculum for my Language Arts students." A teacher in Texas said: "Because we don't use textbooks in my school (we use Core Knowledge Curriculum) I have to develop my own lessons. Your site is a wonderful and interesting tool—for me AND my students." A teacher from New York City

said: "Very thorough and straightforward. I am looking forward to structuring my semester with the ideas presented here." A university professor on leave teaching in public school in rural New Mexico said: "I am amazed at the wonderful work you are doing. Your web site is incredibly helpful. I look forward to staying in touch with you."

Not surprisingly, those who used the site often expressed the hope that such work could be replicated in other parts of the country. A teacher in Pennsylvania said: "I love the way your site is set up. I have never seen anything like it. We need to be doing the same at our school." A college student in Oklahoma said: "Our country needs more programs like yours." And a university administrator in New York City said: "I have just started working in a school university partnership program. The web site has been very valuable in helping me shape my thinking about the nature of professional development collaboration between high school and college teachers."

"The web site has been very valuable in helping me shape my thinking about the nature of professional development collaboration between high school and college teachers."

*—University
Administrator*

Institute Centers for Curriculum and Professional Development

In 1996 the Institute undertook with the New Haven Public Schools a new program designed to broaden and deepen its efforts to strengthen teaching and learning in the schools. It offered several elementary, middle, and high schools the opportunity to establish an Institute Center for Curriculum and Professional Development within their buildings. Five such Centers were established in 1996. Over the next four 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. Through most of 2000, eleven Centers were 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, Hill Regional Career Magnet, and Wilbur Cross). One of the main challenges faced by the high school Centers during this period is the dislocations caused school renovations and the difficulties that still attend the move Hill Regional made into its new facility a year ago. At the end of the year, progression with renovations at Hillhouse High School made possible the renewing of the Center that had been previously located there.

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

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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 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 near-by 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 on-line, 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.

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 mini-grants from the Institute to implement approved aspects of their Center Academic Plan. During 2000 the Centers were supported by a second grant for high school Centers from the Arthur Vining Davis Foundation, received in 1999, and a grant for new Centers from the Jessie Ball duPont Fund, received in 1997.

The Centers document their activities through a mid-year and an end-of-year report. The Steering Committee has established a Coordinating Team at each Center, and a Center Coordinator exercises leadership within that Team. A member of the Steering Committee (at the same school level) 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. They 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 staff liaison to the Centers, communicating with Center leaders and visiting each of the Center schools. She participates in the meetings of the Institute Steering Committee and Center Coordinators and assists teachers in Center schools to prepare applications for mini-grants to support Center Activities.

The Assistant Director and the Steering Committee organized in 2000 a series of workshops for teachers from Center schools (mentioned above under "Electronic Resources and Assistance") that are designed to encourage them to become more familiar with and to use the curricular resources in their Center. The workshops were held each Wednesday afternoon from mid-January until early April in computer classrooms in the Yale libraries. The first hour of each workshop, led by the Institute computer assistant, was devoted to Institute

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resources online, including use of the Institute web-site and email. The second hour, led by members of the Steering Committee and other Fellows, differed from week to week and presented various uses of Institute resources from curriculum projects to Academies for students and special projects supported by planning grants and mini-grants from the Institute.

A Retreat each semester also provides an opportunity for exploration of additional ways for Centers to work together on alignment of Institute-developed curriculum units with district standards and goals and on mentoring first-year and other new teachers.

During each semester three very different meetings provide detailed communication among the Steering Committee and the various Centers. The sequence begins with a meeting of the Steering Committee and the Center Coordinators. There follows for the Center Coordinating Teams an after-school Forum on Exemplary Practices and Plans, which enables lively discussion among the teachers and staff members and fuller exchange of ideas among the Centers. Finally, a Retreat each semester enables the Centers to give more in-depth reports on their successes and problems and to share written material and hold workshops where teachers might learn from one another about curriculum planning in one school that might be used in another. It also provides an opportunity for exploration of additional ways for Centers to work together on alignment of Institute-developed curriculum units with district standards and goals and on mentoring first-year and other new teachers.

For the Forum held on May 11, 2000, each Center selected a topic to highlight and share with colleagues from other Centers. Joseph H. Lewis, East Rock Global Studies Magnet School, spoke on "Developing Curricula for Center School Activities"; Lisa M. Galullo, Hill Regional Career High School, on "Aligning the Curriculum with Institute Units"; and Jean E. Sutherland, L. W. Beecher School, on "Identifying Institute Units Directly Related to Elementary School Curriculum Areas as Defined on Student Report Cards." Mary E. Jones, Roberto Clemente Middle School, spoke about "Building a Team within a Diverse Staff." Val-Jean Belton, James T. Hillhouse High School, spoke on "Developing a Center Plan"; Monique Y. Gisser, Wilbur Cross High School, on "Experiencing the Growing Pains of a New Center"; Kelley Howe, Jackie Robinson Middle School, on "Providing an Overview of Activities in Progress"; and Waltrina D. Kirkland-Mullins, Davis Street Magnet School, on "Attracting Teachers to Use Centers with Mini Grants and Planning Grants." Norma Rojas, Fair Haven Middle School, spoke on "Implementing Mini Grants in the Arts"; and Peter N. Herndon, Sheldon A. Ayers, and Donna Frederick-Neznek, Cooperative Arts and Humanities High School, on "Planning and Implementing a School-Wide Event." There was also discussion of the Summer Academy being planned for 2000, and of plans and topics for Center leaders to explore at the Retreat to be held on Friday and Saturday, July 7-8.

That Retreat began with a working dinner on Friday evening attended not only by teachers who are Center leaders but also by members of the central New Haven Public School administration, as well as by principals and assistant principals. The dinner began with remarks by Associate Superintendent Verdell Roberts and Principal Salvatore Punzo of East Rock Magnet School

that challenged everyone to formulate questions that Center leaders would pursue during the full day of meetings on Saturday. Associate Superintendent Verdell Roberts challenged the teachers and administrators present to consider ways that Institute Centers might help "revitalize the school district and renew the partnership" between the schools and the University that the Institute represents. She urged everyone to think about new ways for aligning curriculum units with school curricula, for Fellows sharing their own units more widely with other teachers, for emphasizing the relationship between Fellows' work in the Institute and the district's literacy initiative, and for devising ways to show the relationship between curriculum units and standards and assessments. She also urged Center leaders not to lose sight of the tremendous potential of using the arts and music to engage and excite students.

After discussing the questions proposed, each dinner table group added its own questions and reported to the session at large. The all-day session on Saturday then focused on three main areas: Center resources and infrastructure, Center activities related to student literacy, and Center staff development plans.

The Forum on October 18, 2000, also included presentations by Center leaders on important activities. Mary E. Jones, Roberto Clemente Middle School, spoke on "Extending the Summer Academy to Meet the Curriculum in the Classroom"; and Joseph H. Lewis, East Rock Global Magnet School, on "Utilizing Yale-New Haven Teachers Institute Resources to Plan Thematic Units." Anthony F. Solli and Karen De Fur, Career Regional Magnet High School, spoke on "A Center in Transition"; and Stephen P. Broker and Gail Hall, Wilbur Cross High School, on "Moving On Into the New Millennium." There was discussion of making connections to the District's literacy initiative and curriculum framework, and possible workshops on Center Resources. Jean E. Sutherland and Geraldine P. Martin, L. W. Beecher Elementary School, then spoke on "Expanding Upon the Goals of this Year's Summer Academy: Using Yale-New Haven Teachers Institute Curriculum Units to Develop an Extended Day Program"; and Peter N. Herndon, Donna Frederick-Nezdek, and Sheldon Ayers, Cooperative Arts and Humanities High School, spoke on "Organizing an All-School Event: Black History Month Events." There was also discussion of topics and plans for the November 17-18 Retreat for Center leaders.

That Retreat was organized rather like the April Retreat. During the opening remarks on Friday evening, Associate Superintendent Verdell Roberts described ways in which the Institute Centers can assist the school district. She spoke about how Centers allow teachers "to move from their individual interests into learning communities" and "to integrate the district's focus areas more into their work." She stressed that the Institute allows teachers and schools "to be creative with the mandates the district issues," and she urged that the group consider planning an exhibition on the teaching of Institute-developed units for school administrators, politicians, and area business people. Charles Warner, Director of Instruction for the New Haven Public Schools, then spoke about the "common core of learning" and urged the Centers to con-

Associate Superintendent Verdell Roberts challenged the teachers and administrators to consider ways that Institute Centers might help "revitalize the school district and renew the partnership" between the schools and the University.

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sider projects for applying "action research" in their work. Jean Sutherland of Beecher Elementary School, a Center Coordinator and member of the Institute's Steering Committee, presented a summary of Center activities over the past year, emphasizing the high degree of teacher involvement in formulating and executing programs through formal and informal teams of teachers.

The Retreat theme was "Making Connections . . ." to assessment tools, the New Haven curriculum frameworks, and the district's literacy initiative. These three themes guided discussion during the following day.

Teachers sought to develop the skills and understanding that students need to meet New Haven's curriculum standards as well as to help students to prepare for the Connecticut Academic Performance Test.

Sixteen Institute-developed curriculum units were consulted, fourteen of which were written by teachers other than those involved in the Academy.

An important effort by the Centers was the Summer Academy, the fourth Academy sponsored jointly by the Yale-New Haven Teachers Institute and the New Haven Public Schools. The two-week program, July 10-21, which served 45 students in grades three to twelve, emphasized improving student literacy through a curriculum based on Institute-developed units that focus on multicultural studies. Teachers sought to develop the skills and understanding that students need to meet New Haven's curriculum standards as well as to help students to prepare for the Connecticut Academic Performance Test. The Academy was held at Hill Regional Career Magnet High School, and the Institute Center there was the hub for teachers to meet for planning and evaluation before, during, and after their classes. The course of study was developed by Academy teachers themselves. Elementary school students studied the cultures of Africa and Puerto Rico. Each day's curriculum included a 45-minute creative writing activity related to their area of study. For this work, teachers selected ideas from three existing Institute curriculum units. Middle school students focused on diversity through a study of Japanese and Native American cultures. The teachers consulted eight Institute units in developing a curriculum that included daily reading, writing, arts and crafts, and a math challenge. For the high school component, which concerned Native American culture and history as well as the Civil Rights Movement in the United States during the 1950s and 1960s, sixteen Institute-developed curriculum units were consulted, fourteen of which were written by teachers other than those involved in the Academy. This served to demonstrate the value of Institute-developed units to teachers other than their authors.

The 2000 Summer Academy pointed out once again the value of teachers working together to plan and implement their own curriculum based on teacher-developed materials that they believe will promote student interest and learning. Institute Centers in the fall planned ways of following through with the Summer Academy by continuing to work with Academy students and by introducing Academy curricula in regular courses and after-school programs.

Teachers in the Centers also work in teams with other teachers in their school to relate Institute curriculum units to school themes and to district goals. The Institute provides mini-grants to support a wide range of work of this kind. At Cooperative Arts, for example, Hispanic Cultures week and African American month result from planning supported by Institute mini-

grants, done in the Institute Center and using Institute curriculum units appropriate to the theme. Here too an art teacher, a writing teacher and a history teacher had collaborated on a unit titled "Masked Meaning." In May 2000, 28 ninth grade students read African literature, wrote their own myths and created masks, which they then used to dramatize the myths they had read and written. At East Rock Magnet School, a mini-grant supported an after-school program titled "Fun with Letters, Sounds, Words and Numbers" for a group of kindergarten and first grade students identified as at risk. East Rock's International Fair, held in April 2000, and supported by mini-grants, was the culminating activity for the school's year-long study of different cultures. As a result of a mini-grant, a team of teachers at Beecher Elementary prepared a guide to all the Institute-developed curriculum units that best pertain to elementary subjects on elementary school report cards, thereby reflecting district goals. This is a major accomplishment and a document that will now be widely shared to encourage the use of Institute units throughout New Haven elementary schools.

A team of teachers at Beecher Elementary prepared a guide to all the Institute-developed curriculum units that best pertain to elementary subjects on elementary school report cards, thereby reflecting district goals.

The Institute seeks not only to institutionalize the Centers' work in New Haven but also to integrate the Center concept in its work with demonstration sites in other cities. All of the New Haven teachers on the implementation team for the National Demonstration Project this year were therefore either Steering Committee members or Coordinators for the Center in their own school. These are the teachers who visited the four new Institutes in May and June. Each of these site visits provided colleagues in other cities with detailed information about the operation of Institute Centers in New Haven. Then, during the Second Annual Conference of the National Demonstration Project on October 13-14, the Steering Committee member responsible for New Haven high school Centers conducted two workshops that followed up on the conversations that had occurred on-site and acquainted additional teachers and faculty members with the Center concept and the Centers' operation in New Haven.

Preparation for the Program in 2001

From June through August the Institute identified and approached the 50 teachers who would serve during the 2000-2001 school year as the 19 Representatives and 31 Contacts for their schools. Fifty-seven teachers had served in these ways, 15 as Representatives and 42 as Contacts, during 1999-2000. The increase in the number of Representatives for 2000-2001 would in fact mean that a much more satisfactory recruitment process could be conducted. Representatives were selected according to recommendations of the teachers who served as seminar Coordinators and conversations they had with persons who had served as Representatives in the past, with other Institute Fellows, and with some school principals. Because the Coordinators had become acquainted with all current Fellows, this mode of selection assures that all Fellows receive consideration for leadership positions. Because the Representatives who had served in 1999-2000 were widely regarded as effective, we sought a high degree of continuity of Representatives.

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In 1999-2000 the Representatives and Contacts were well distributed across New Haven schools with 26 (47 percent) representing elementary schools, 7 (10 percent) representing middle schools, 5 (9 percent) representing transitional schools, and 12 (21 percent) representing high schools. For 2000-2001, there was a rather similar distribution but with a higher proportion of Representatives, with 19 (38 percent) representing elementary schools, 8 (16 percent) representing K-8 schools, 7 (14 percent) representing middle schools, 3 (6 percent) representing transitional schools, and 13 (26 percent) representing high 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, 13 were Black Non-Hispanic, 26 were White, and 3 were Hispanic. 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 bi-weekly meetings or to commit themselves to Institute participation. Through the Representatives and Contacts, the Institute ensures that all teachers throughout the school district may have an effective voice in shaping a program of curricular and staff development in which they will then have the opportunity to take part.

The Representatives held their first meeting of the new school year on September 12, 2000, and thereafter met twice monthly with the Director. On September 26, the Institute held a reception for Representatives and Contacts, so that they might become better acquainted with one another and might discuss plans for 2000-2001. 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 approved the following six seminars for 2001: Robert A. Burt, Alexander M. Bickel Professor of Law, "Medicine, Ethics and Law"; Martin D. Gehner, "Professor Emeritus of Architectural Engineering, "Bridges: Human Links and Innovations"; Jules D. Prown, Paul Mellon Professor Emeritus of History of Art, "Art as Evidence: The Interpretation of Objects"; Robert Schultz, Associate Professor, Yale Child Study Center, "Intelligence: Theories and Developmental Origins"; Thomas R. Whitaker, Frederick W. Hilles Professor Emeritus of English, "Reading and Writing Poetry"; and Bryan J. Wolf, Professor of American Studies and of English, "Race and Ethnicity in Contemporary Art and Literature." The process of approval worked exceptionally well this year: it was in fact a model of the Institute approach. The Representatives were able to consolidate a great many interests expressed by teachers into this list of seminars.

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 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 2000 the Steering Committee consisted of Jean E. Sutherland, Peter N. Herndon, and Carolyn N. Kinder. 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, and this provided its main work for 2000. 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 in the Centers, and the carrying out of the series of computer workshops. It conducted two meetings with Center Coordinator and planned the two Forums for the Centers and the two Retreats for Center Leaders. It handled the preliminary planning for the Summer Academy. And during the planning for the National Conference on October 13-14, it identified the members of the Implementation Team who would form the New Haven conference team and the volunteers who would make presentations.

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University Advisory Council

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

The University Advisory Council meets once each year; the Executive Committee 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 2000 the Executive Committee met in April, May (twice), October, and December. These meetings concerned priorities and plans for the Institute's work locally and nationally. The following issues received most attention: meetings with President Levin concerning the Institute's national initiative; development of a draft proposal for a twelve-year national initiative; planning for the Second Annual Conference of the National Demonstration Project; planning for the meeting in the fall of the National Advisory Committee and the Presidents, Chancellors, and Superintendents from the demonstration sites; and considering the recommendations made by that group with regard to partner or intermediary organizations with which we might work in the future and the two years of planning that should proceed the twelve-year initiative. Acting as the Institute's course-of-study committee, the Executive Committee also approved the seven seminars offered in 2000.

On May 1 the full University Advisory Council held its seventh annual meeting with President Levin. Co-chair Sabatino Sofia opened the meeting by introducing the new members: Glenda E. Gilmore, Paul Gilroy, Langdon L. Hammer, Peter Salovey, and Ian Shapiro.

Director James R. Vivian then offered a brief report, in which he emphasized that the Institute has balanced successfully the demands of its program locally and its initiative nationally. We have gained ground administratively by more than doubling the size of the Institute staff, installing a new computer system, and designing a database that integrates the Institute's various functions and makes us more efficient. He mentioned again this year that the Institute's most pressing financial need is to secure adequate permanent fund-

ing that will place its work in the sciences on the type of stable financial foundation that we have constructed for its work in the humanities. We have identified a small number of gifts that allow us to open an endowment account not restricted to the humanities, but this fund is very small, and most of the multi-year grant support we have received for science seminars ends this year. Vivian surveyed work done by the Centers for Professional and Curricular Development in the schools. And he summarized the progress of the National Demonstration Project.

Thomas R. Whitaker expanded on certain aspects of Vivian's report, emphasizing the ways in which the National Demonstration Project is being documented and what has been achieved thus far. Rogers M. Smith then spoke of the national seminars and the site visits, and he broached the possibility of an expanded national initiative in the future, which might add two Institutes a year over the next few years. He asked if the University Advisory Council agreed with the role that the Executive Committee envisioned for the New Haven Institute in the next phase of the national initiative. And he asked, if so, whether we should now give more priority to obtaining state and national governmental as well as foundation financial support for the national project, and should we actively seek to enlist the participant institutions and appropriate members of the National Advisory Committee in these efforts.

In the discussion that followed, there was general approval expressed of the direction of the continuing national initiative. President Levin, however, urged us to develop a much more ambitious proposal, which would outline a more compelling rationale for the expansion of Teachers Institutes across the country. Members of the Committee indicated that the Executive Committee should revisit the planning for the national initiative with this advice in mind.

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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 491 New Haven teachers who have completed the program successfully at least once between 1978 and 2000, about half (49 percent) are currently teaching in New Haven. An additional 38 (8 percent) have assumed full-time administrative posts in the school system. Thus three fifths (57 percent) of all Fellows since 1978 are currently

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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 (below) shows, a considerable number of current elementary school teachers in New Haven (13 percent) have completed successfully at least one year of the Institute. (Elementary school teachers were first admitted in 1990.) As Table 3 (facing page) shows, 33 percent of New Haven high school teachers of subjects in the humanities and sciences, 36 percent of transitional school teachers, and 29 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 37 percent have participated in the Institute once, 30 percent either two or three times, 32 percent between four and twelve times, and 1 percent between 13 and 21 times. On the other hand, of those Institute Fellows who have left the New Haven school system, 54 percent completed the program only once, and 33 percent took part two or three times. Only twenty-four 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.

Table 2
Institute Fellows as a Percentage of Eligible
New Haven *Elementary* School Teachers

Kindergarten	1%
Grade 1	8%
Grade 2	7%
Grade 3	10%
Grade 4	12%
Grade 5	18%
<i>Total K-5*</i>	13%

*K-5 teachers in K-8 schools are included here. This table also includes all other subjects, for example non-graded art and special education teachers, librarians, and curriculum coordinators.

Table 3

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

	Middle Schools**	High Schools	Transitional Schools	Overall
English	40%	32%	25%	35%
History	42%	22%	11%	26%
Languages	16%	21%	0%	18%
Arts	35%	31%	0%	32%
Math	12%	27%	33%	22%
Science	18%	28%	50%	26%
Grade 5*	0%	n/a	n/a	0%
Grade 6	23%	n/a	n/a	23%
Grade 7	21%	n/a	n/a	21%
Grade 8	16%	n/a	n/a	16%
Total***	28%	33%	31%	30%

*Grade 5 teachers are included here for middle schools only; grade 5 teachers in elementary schools and K-8 schools are reported in Table 2.

**All K-8 school teachers of the subjects listed here count as Middle School teachers. K-5 teachers in K-8 schools count in Table 2.

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

n/a = not applicable

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.

In addition to their worldwide circulation in electronic form, the curriculum units, the current guide to the units, and the cumulative index to the units are given annual circulation in print. They are supplied to current Fellows and Seminar Leaders, to each school in the New Haven district, and to New Haven Public School supervisors and administrators. In 2000, the distribution was as follows: 76 copies of the units, 71 copies of the guide, and 182 copies of the index.

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The Annual Report is itself a massive compilation of information and statistics drawn from a variety of sources, including the questionnaires completed by Fellows and seminar leaders, the tracking of all previous Fellows, statistics pertaining to the New Haven Public Schools, demographic analyses, minutes of meetings, reports from the Centers, reports from the new Institutes in the National Demonstration Project, reports to funders, and so forth. The work that provides material for its preparation extends over the entire year. The Annual Report is sent within Yale University to members of the administration, to the Yale Corporation, to the Yale Development Office, to selected members of the faculty, and to several internal organizations. It is sent also to actual and potential funders, to the Chief State School Officers, to State Governors, to selected members of Congress, to staff in several Federal agencies, to the New Haven Administration and Board of Aldermen, and to those involved in the National Demonstration Project. The total distribution of the 1999 Annual Report was: 1255 copies.

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 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 met on November 28, 2000, in conjunction with a meeting of the presidents and superintendents (or their delegates) from the four demonstration sites with President Levin. Meeting separately at first, the Committee and the presidents and superintendents (and their delegates) considered the accomplishments thus far of the National Demonstration Project and a more ambitious draft Proposal for a second phase of replications of the Teachers Institute over the next ten years to be established through the agency of a national association of Teachers Institutes. The two groups then met jointly to share their comments on these topics; and then the National Advisory Committee continued its deliberation concerning the draft Proposal.

Those in attendance had great interest in the draft Proposal. They were convinced of the value of working together on a national scale, and they looked forward to an expansion of the group of Teachers Institutes. Several members of the committee spoke of the timeliness of this proposal and the boldness of its vision. Superintendents looked forward to expansion of the work in their cities and collaboration with other Institutes on a national scale.

Members of the National Advisory Committee offered suggestions about the kinds of preliminary work that should probably be carried out before launching upon this ambitious plan. They suggested that more research be done on the actual accomplishments of the Institutes now in existence. They suggested also that we consider more fully what has been learned in New Haven about the best strategies for implementing the process of establishing new Institutes. They also anticipated that it would be necessary in one or more ways to demonstrate the direct or indirect results of the Institutes with regard to increases in student learning. They were also clear that such a proposal must

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indicate how it will have systemic influence on education in this country. One might begin, they suggested, by dealing now with the question of the systemic influence at each demonstration site. The issue, they said, is not just a numerical scaling up in a larger city; it is rather finding ways to have a systemic effect that goes beyond the small numbers of seminars that can be fielded at this time.

It was strongly suggested, therefore, that the Proposal be modified to include a two-year preparation phase, during which all five of the existing Teachers Institutes would be engaged in a process of consolidation, intensification, and preparation. Each new Institute would be engaged in research on its own kinds of effectiveness and investigate the best ways to have systemic effects within its city, state, or region. At the same time, the Yale-New Haven Teachers Institute would be engaged in similar research into its own accomplishments, would be reflecting on what it has learned during the National Demonstration Project, and would be gearing up for work on the next major effort. The draft Proposal is therefore being modified to include this preparation phase.

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 (now the Wallace-Reader's Digest Funds), 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 the Teachers Institute had invited fourteen sites to submit proposals for 8-month Planning Grants, had supervised the awarding of Planning Grants on recommendation of a National Panel to five of the seven applicants, had provided for the sites receiving Planning Grants a "July Intensive" that enabled a practical immersion in the processes of the Institute, and had then, on recommendation of the National Panel, awarded 3-year Implementation Grants 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.

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 a variety of institutional arrangements and different strategies in approaching those problems. The institutions of higher education include: in Pittsburgh a partnership between a private university focused upon the sciences and a small liberal arts college; in Houston a state-supported urban university; in Albuquerque a flagship state university; and in Irvine a university that is part of a larger state system and is collaborating with the nearby school district of Santa Ana.

During 1999 the Yale-New Haven Teachers Institute began, in part through a January Orientation Session, a second July Intensive Session, and the First Annual Conference in October, to work with the four new Teachers Institutes on their plans for the coming years, to provide them with technical assistance, and to encourage their collaboration. It continued to work also with the newly established National Steering Committee and National University Advisory Council. It conducted the first series of the expected annual site visits to the new Teachers Institutes. And it began to work with the contracted external evaluator for the Project, Policy Studies Associates.

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During 2000, the Yale-New Haven Teachers Institute continued these efforts, in part through a Directors' Meeting in April and a second series of site visits to the new Teachers Institutes. With the help of the National Steering Committee, the National University Advisory Council, and a specially appointed planning committee, it conducted the Second Annual Conference in October, during which all five Teachers Institutes now collaborated in presenting the major challenges and accomplishments of the National Demonstration thus far. It also, as described earlier, held a meeting in November of the National Advisory Committee jointly with senior administrators from the partnerships collaborating in the new Teachers Institutes, during which there was enthusiastic support and helpful discussion of a Draft Proposal for the next phase of the national initiative. It continued to work with the contracted external evaluator, Policy Studies Associates. As will be described more fully in a later section, it began detailed planning for Number 9 of the periodical *On Common Ground*, which will feature the processes and accomplishments of the National Demonstration Project. And, in response to the suggestions made at the meeting of the National Advisory Committee and senior administrators from the new Teachers Institutes, it revised and expanded its Draft Proposal for the further establishing of Teachers Institutes.

The Roles of the Yale-New Haven Teachers Institute

During the Grant from the Fund, the Yale-New Haven Teachers Institute has a dual relationship to the four other Teachers Institutes. It is both the monitor of the Re-Grants to those Institutes and a senior colleague. It is responsible for offering technical assistance, for convening in 1999 the January Orientation Session and the July Intensive Session, for convening Directors' meetings in 2000 and 2001, and for convening in 1999, 2000, and 2001 the Annual Conferences in October. It maintains the National Steering Committee and the National Faculty Advisory Council, sponsors the national periodical *On Common Ground*, and helps in other ways to further the aims of the entire network 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. It receives reports from the new Teachers Institute and compiles its own report to the Wallace-Reader's Digest Funds. It collaborates with Policy Studies Associates in providing information for their external evaluation. 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 network that might in the future extend its membership to include Institutes at yet other sites.

These various roles have 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 in that year, 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 were then calls for more equal participation of all five Institutes in the Second Annual Conference in October 2000. The Yale-New Haven Teachers Institute therefore joined the other Institutes in sending a team to this Conference, and the national planning committee shaped a program that would ensure that the various topics were presented by representation from all Institutes.

During 2000 the Implementation Team of Yale faculty members and New Haven Teachers again assisted with planning, carrying out, and assessing the site visits to the four new Institutes. As in earlier years the Implementation Team discussed a Protocol that was established to guide the members of the site visit teams. (For members of the Implementation Team, see Appendix.) Supplementary Protocols were also designed to highlight the issues specific to each site that had emerged in the course of monitoring by Institute staff and members of the Implementation Team. Because the visits this year focused primarily, though not exclusively, on the seminars and curriculum units, the site visits were conducted for the most part by university faculty members and school teachers. A visit to Houston on May 2-3 was made by Thomas Whitaker and Sandra Ferdman-Comas (Yale faculty members), Annette R. Streets (Assistant Director, Yale-New Haven Teachers Institute), and Mary Jones (New Haven teacher). A visit to Irvine-Santa Ana on May 8-9 was made by Thomas Whitaker and Rogers Smith (Yale faculty members), and Lisa Galullo and Jean Sutherland (New Haven teachers). A visit to Pittsburgh on May 22-24 was made by Thomas Whitaker and Sabatino Sofia (Yale faculty members), Steven Broker (New Haven teacher), and Carolyn Kinder (New Haven assistant principal). And a visit to Albuquerque on June 22-23 was made by Thomas Whitaker and Jules Prown (Yale faculty members), and Donna Frederick-Neznek and Peter Herndon (New Haven teachers).

The Common Work of the Five Teachers Institutes

The Directors' Meeting: A Directors' Meeting of the five sites was held on April 29, 2000, in New York City. Its agenda had been shaped through e-mail communication among the five Directors. After a sharing of notable accomplishments since the inception of the National Demonstration Project in January 1999, there was a general discussion of topics of interest to the Directors.

The group agreed on a planning process for the Second Annual Conference, to be held in New Haven on October 13-14. A planning committee chaired by Mel Sánchez of Santa Ana High School, consisting of a teacher and a faculty member from each Institute and a Director-at-large, would pro-

pose topics and invite presentations and, with the help of the National Steering Committee and the University Advisory Committee, establish the program.

The group also discussed ways in which the five Institutes might wish to work together after the conclusion of the Wallace Funds' grant. Annette Streets, Assistant Director of the Yale-New Haven Teachers Institute, spoke of the Centers for Curriculum and Professional Development in New Haven schools as an example of one way of extending the influence of a Teachers Institute and recruiting new Fellows. Because of our desire that the new Institutes should "begin small," we had not included this element of our work in the National Demonstration Project. We are now suggesting to the Institutes, however, that it may be a useful way for them to have a greater systemic impact. During 2000, the Pittsburgh Teachers Institute and the UCI-Santa Ana Teachers Institute would show special interest in experimenting with some form of such Centers in their own cities.

No disagreement was expressed with regard to the Basic Principles to which the National Demonstration Project has been committed.

All agreed that after the conclusion of the present Grant, there should be some continuing association or consortium of Institutes.

There was also strong testimony to the importance of having an enthusiastic Representative in a school, in order to contribute to successful recruiting. The Director from Pittsburgh urged the importance of keeping the Institutes "unique" in their emphasis upon the collegiality of school teachers and university and college faculty members. No disagreement was expressed with regard to the Basic Principles to which the National Demonstration Project has been committed, although there were some suggested departures from the Yale-New Haven practice, including the "Talks" and the faculty members' compensation. Directors from Pittsburgh and Irvine-Santa Ana spoke of the teachers' desire that their Institutes become more closely related to the districts' programs of professional development. A Co-Director from Albuquerque asserted that "we have become different examples of things that work well." The Director from Houston spoke of the need for each Institute to have a Director who could proceed energetically with the task of fund-raising. Such a person, he said, "is our most precious commodity." Several Directors expressed concern that scaling up in their cities might alter the nature of the personal relations within an Institute. But all agreed that after the conclusion of the present Grant, there should be some continuing association or consortium of Institutes.

Directors from all the demonstration sites were emphatic in their praise of the National Seminars in New Haven (or, potentially, elsewhere) as a means of bringing into the Institutes a new group of people in subsequent years and of continued sharing and cross-fertilization among the sites. There was also discussion of the need for links among continually updated electronic databases at all of the Institutes, with a search engine that would be applicable to all sites. There is already evidence of sites learning from each other: the idea of an Open House at Houston, for example, which had been picked up from the New Haven program, has now been adopted elsewhere. As one Director put it, "We need a continuing conversation, and a national presence, to influence policy and to provide us with an energizing experience."

The Faculty Forum: In May 1999, as a result of discussions in the National University Advisory Council, the Yale-New Haven Teachers Institute had established a moderated electronic forum for the exchange of views and information by college and university faculty members involved in the National Demonstration Project. This has been an attempt to encourage and facilitate the "acculturation" of university faculty members within the Teachers Institute approach. Because a Teachers Institute is meant to serve the school teachers, they have understandably found it easier to discern its importance to be important to them and have often been for their lives and careers. We were also able to devise ways in which school teachers could participate in National Seminars and engage in the writing of curriculum units, so that they could swiftly understand the Institute process from the inside. And there has often been substantial continuity of participating teachers from year to year. The participation of faculty members in the July Intensives has been less complete and less sustained, and Directors have sometimes not been prepared to advise and consult with newly appointed as seminar leaders. We have therefore been searching for ways to provide continuing involvement and information to university faculty members, so that they can become over the longer-term enthusiastic and successful contributors to the program.

The Teachers Institute Faculty Forum (TIFF), which may be addressed at tiff@yale.edu, is moderated by Professor Jules D. Prown of Yale University. Because very little traffic had developed, TIFF became a topic for faculty discussion during the July Intensive Session and the First Annual Conference. At a meeting in December 1999 a diverse group of past Institute seminar leaders in New Haven discussed what would be, in the light of their practical experience, the most useful issues to be posted electronically in the hope of stimulating further discussion on TIFF. They 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. The list would 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. Despite such efforts, in 2000 there continued to be little traffic on this forum.

As we think about plans for a second phase of Institute development, we continue to seek other means to bring university faculty members into the culture of the Teachers Institute. We do not believe that the demonstration sites should not carry the entire burden of working faculty members into the Institute's approach, and we hope to find yet better ways of continuing communication with those participants in the new Institutes.

The Second Annual Conference: The Second Annual Conference was held in New Haven on October 13-14. Each site had been encouraged to send three current or future seminar leaders, seven current Fellows, and its Director to this meeting. Selected members of the Implementation Team for the National Demonstration Project comprised the Yale-New Haven team for the Conference. The planning committee had planned the program after extensive e-mail consultation with those in New Haven and at the demonstration sites. This process was not entirely satisfactory, because the sequential process meant that later suggestions received more emphasis than earlier ones. There was general approval of the program that had been developed, but, as will be described later, it was decided to use a different mode of planning for the Third Annual Conference.

"We're very confident that the information we are going to be generating through the evaluation . . . will allow us to be able to talk about the great work that you're doing so that other people are going to be excited about it . . . information that's going to be able to leverage the work and take it to another level in years to come."

*—Ian Beckford
Evaluation Officer
Wallace-Reader's
Digest Funds*

After opening remarks by Mel E. Sánchez, Chair of the Conference Planning Committee, representatives from each of the five Institutes reported on their work during the past year. James R. Vivian then introduced Olivia Dixon, Program Assistant from the Wallace-Reader's Digest Funds, who was attending as a representative of the Program Director, Mary Lee Fitzgerald. Ian Beckford, Evaluation Officer for the Wallace-Reader's Digest Funds, then introduced his assistant, Marie Connolly. Beckford re-affirmed the purpose of the external evaluation by Policy Studies Associates "to generate lessons that will be relevant to policy makers and practitioners in the field," and he congratulated the demonstration sites on what they had thus far accomplished. "We're very confident," he said, "that the information we are going to be generating through the evaluation will be information that will allow us to be able to talk about the great work that you're doing so that other people are going to be excited about it, and equally importantly people that you want to work with to move your work forward will be excited about this." The Funds see it, he added, "as information that's going to be able to leverage the work and take it to another level in years to come."

James R. Vivian then offered an overview of the Conference. He noted that almost two thirds of all Institute representatives in attendance were school teachers, and that more than half of those from a demonstration site were participating in their first Institute meeting in New Haven. "Following the Institute approach," he said, "this meeting was planned by the individuals who would take part." He thanked the members of the Conference Planning Committee for the detailed plans they had made, and thanked also the seventy volunteers who offered to be one of the twenty-seven leaders or presenters needed for the program the Committee designed.

After a break for examining displays from all five Institutes, the participants were divided into three Roundtable Discussions on Seminar Experiences, each led by a seminar leader and a Fellow from different sites. In the discussion led by James Davidson of Carnegie Mellon and Mary Ann Natunewicz from the Houston Independent School District, for example, the opening remarks emphasized the desirability of a firm structure in the semi-

nars, the value of collegiality, and the various relations that may obtain between the common reading and the curriculum units. These remarks led to comments on the need to assist seminar leaders in understanding how to provide structure in a seminar that responds to a range of needs expressed by the Fellows. One Fellow spoke of difficulties in reading and writing that resulted from a compressed schedule at his site. A seminar leader noted that it was necessary for the Fellows in a seminar to learn about each other's topics very early in the sequence. Several Fellows spoke of the increasing concern with state standards, and the need to correlate curriculum units with them. A Director of Curriculum and Staff Development warned against thinking that the mandated standards and individual creativity were incompatible. "What this project can do," she said, "is teach how to be inquisitive and creative in shaping curriculum and responding to it. Those are very much the qualities that the standards should be requiring of students."

A Director of Curriculum and Staff Development warned against thinking that the mandated standards and individual creativity were incompatible.

In this group there was also appreciation expressed for the presence of elementary teachers as Fellows. A high school teacher noted that "the role of the elementary teacher is fundamentally the same as that of a teacher in middle school or high school." A kindergarten teacher spoke warmly of the ability of her students, as they worked with the unit, to team with older children from first through fourth grade. There was further discussion of the process of learning in a seminar. A seminar leader urged Fellows to be aggressive in making use of the seminar leader. A Fellow noted that "our process of learning in the seminar tells us about how people learn—and we can transfer that to our classes." When asked how the seminars might work yet better, the participants mentioned several topics: the need for more assistance to Fellows in writing a curriculum unit; the difficulty of writing units if the seminar had already concluded; the advantage of trying out units in class while they are being prepared; and the usefulness of adding to the curriculum units, when published on-line, some "footnotes" on how the unit worked in the classroom.

Each of the participants then had an opportunity to attend two of the eight concurrent (and then repeated) Roundtable Discussions on the following topics: "Preparing a Seminar Syllabus," "Helping Teachers Write their Units," "Serving as a Seminar Coordinator," "Recruiting Your Fellow Teachers," "Creating Incentives for Faculty Participation," "Scheduling Seminars and Unit Writing," "Setting Up Institute Centers in Schools," and "Publicizing Institutes and Disseminating Curriculum Units."

In one, a discussion on "Creating Incentives for Faculty Participation," led by Michael Field of the University of Houston, the question arose of the designated pool of Fellows. One faculty member suggested that their Institute might best focus upon only those teachers who are best prepared and most ready to take on difficult challenges. Another responded that the National Demonstration Project, like the Yale-New Haven Teachers Institute, operates on the assumption that all teachers, regardless of their previous training or preparation, should be assisted to improve their understanding of the content

areas in which they must teach. We should remember, he said, that these teachers will remain in the classroom regardless of what an Institute may or may not do for them, and that it is our responsibility to do what we can to assist the entire body of teachers in the district. This means that, in leading seminars, faculty members should devise means of adapting their approaches to the content area to make them sufficiently accessible to teachers of varying preparation and ability.

A discussion on "Scheduling Seminars and Unit Writing," led by Stephen D. Franklin of the University of California at Irvine, mainly dealt with issues having to do with fielding seminars that responded to teachers' expressed needs. At some sites there were still difficulties in polling teachers about their needs, and in adjusting proposed topics to those needs prior to the application process. It was suggested that these difficulties could only be solved by yet greater activity by Teacher Representatives at the early stages of planning, so they might go back and forth repeatedly between their schools and the Representatives meeting in the course of refining and approving the seminar topics. There was then extended discussion of problems in scheduling the planning and the offering of seminars, which differ from site to site. Two Teachers Institutes, UCI-Santa Ana and Albuquerque, which had begun with somewhat compressed schedules, were beginning to see a need to expand them over a longer period of time. Several had experienced some difficulty in arousing Fellows' interest in talks given for the entire group, and were inclined to reduce or eliminate that optional aspect of the program. A discussion on "Preparing a Seminar Syllabus," led by Thelma W. Foote of the University of California at Irvine, provided an opportunity for several faculty members to explain how they organized their seminars. These explanations led to extended discussion of the difficulties in organizing seminars in the sciences; and faculty members shared ideas on ways in which those difficulties could be met.

Break-out sessions followed, each led by a Fellow, on "Writing and Teaching Curriculum Units in Different Subject Areas." The areas covered were "Science, Mathematics, and Technology," "Languages and Literature," "History and Social Studies," "Fine and Performing Arts," and "Special Educational Programs." In the session on "Science, Mathematics, and Technology," led by Stephen P. Broker of the New Haven Public Schools, the question of teachers' preparation to write units on the topics selected arose in a somewhat different context. Again it was emphasized that even topics in science may be approached at different levels, and in a variety of interdisciplinary contexts, and that seminar leaders needed to remain open and flexible in response to these opportunities. In the session on "Fine and Performing Arts," led by Marilyn Frenz, a Santa Ana librarian, there was discussion of the variety of curriculum units prepared with library assistance. But then the participants turned to the problem of establishing seminars in the arts and recruiting Fellows for them. It was observed that the arts are relevant to a variety of subjects, and that they are increasingly part of an interdisciplinary focus. A seminar in an artistic field might therefore be of value to Fellows assigned to other

academic subjects or to interdisciplinary work. It was suggested that the Teacher Representatives keep such possibilities in mind as they poll teachers at their schools and work toward a set of seminar offerings.

A Plenary Session, chaired by Doug Earick, Director of the Albuquerque Teachers Institute, was devoted to "Demonstrating Effectiveness: Issues and Opportunities." Paul Cooke, Director of the Houston Teachers Institute, spoke of the importance for some funders of assessment results, and of his experience in securing both significant funding and fresh interest at local schools. James Davidson, faculty member at Carnegie Mellon, spoke of the advantages of an Institute for university participants, as an encouragement to break down the narrow departmental and vocational specialization and to think more about pedagogy. Renée Tolliver, a Pittsburgh teacher, told how curriculum units there are closely related to standards and assessment, how students have become involved in critiquing each other, and how, in a system that increasingly uses portfolio assessment, a student's work on a unit may be expanded toward a graduation project. Mel Sánchez, a Santa Ana teacher, spoke of the increase in self-esteem that he and other colleagues had experienced in the collegial milieu of an Institute seminar, and of his students' gain in intellectual confidence and in the ability to make connections. Verdell Roberts, Associate Superintendent of the New Haven Public Schools, took as her theme the traits of a "good school." She stressed the necessary qualities of professional relations—cooperation, mutual concern for information and creativity, and continuing growth. She quoted Roland Barth: "If students are to grow and learn, everybody in the building must grow and learn." And she developed specifically the ways in which the Yale-New Haven Teachers Institute had helped teachers to grow and to become leaders in their schools and in the district. Of the top schools in Connecticut, she said, five are in New Haven, and four are led by former Fellows in the Yale-New Haven Teachers Institute. In a time when "we are being plagued as never before by those who are outside the classroom telling us what to do," she said, Teachers Institutes have a special importance in providing internal leadership for the schools.

The discussion then focused on the need for various kinds of empirical assessment of the impact of a Teachers Institute. A Yale faculty member suggested that, although quantitative studies of all kinds are quite vulnerable, because one cannot control all the variables, we should compile as much information as we can on how students are meeting state standards, how teachers and students are gaining recognition, and how teachers are developing leadership. Even if we do not have firm evidence of fully quantifiable student outcomes, we can show the correlation of such results in place after place over time. A Director at a demonstration site pointed to the Annual Reports of the Yale-New Haven Teachers Institute, and such other Institute publications as *A Progress Report on Surveys Administered to New Haven Teachers, 1982-1990* and *Teaching in America: The Common Ground*, as containing examples of the kinds of evidence that would demonstrate effectiveness. Others noted the importance of retention of high-quality personnel, accumulated anecdotal evi-

A Pittsburgh teacher told how curriculum units there are closely related to standards and assessment, and how, in a system that increasingly uses portfolio assessment, a student's work on a unit may be expanded toward a graduation project.

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dence, and attitudinal feedback. A Yale faculty member emphasized that qualitative evidence can indeed be systematically gathered and assessed by leaders in the field, as is demonstrated every time we make personnel decisions. A school administrator urged that professional development, as well as test scores, be used as an indicator of school success.

After team meetings, a Closing Plenary Session offered an opportunity for summary reports from each Institute. That from the UCI-Santa Ana Teachers Institute emphasized the need to explore modes of evaluation and to emphasize the ways in which seminar leaders can model the building of a learning community. It also stressed the need for greater collaboration with the school district, the desire to broaden the interface between the University of California at Irvine and Santa Ana, and the hope to maintain the present Institute structure, but with some flexibility, under the control of the teachers. The report from the Albuquerque Teachers Institute paid tribute to the invigorating nature of the Conference, and to its reinforcement of the multiple goals of the National Demonstration. It noted, however, a serious situation with regard to funding in Albuquerque, the need for better communication between Fellows and the administration of the Albuquerque Public Schools, and the need to provide more support to Fellows and seminar leaders in the writing of curriculum units. It also noted, in both the Conference sessions and the seminars, a tension between the collegial nature of the project and the benefits of a more structured approach. And it expressed hope that this Institute might explore the idea of enrolling teams of Fellows, as in New Haven, in order to weave curriculum units more coherently into the school plans.

The report from the Houston Teachers Institute listed matters on which it plans to work: the inclusion of elementary teachers, the placing of all curriculum units on a CD ROM, the improved loading of the web site, and better contacts with donors. It also noted some disagreements within the team about the relevance of linking curriculum units to mandated standards. The report from the Pittsburgh Teachers Institute expressed a desire to explore further the scheduling of seminars, the role of the seminar coordinators in relation to standards, the use of curriculum resource centers, the monthly featuring of a curriculum unit, the establishing of links to other web sites, and the use of reports from Fellows on how curriculum units worked in the classroom. And the report from the Yale-New Haven Teachers Institute noted a desire to explore how standards may be more systematically incorporated in the curriculum units, to improve the assistance offered to Fellows in the writing of those units, and to disseminate information about the units and showcase students' work.

The Second Annual Conference showed that the four new Institutes are prepared to collaborate in many ways, through formal and informal meetings and other communications. They welcomed the fact that the Yale-New Haven Teachers Institute now assumed a position of equality with the others in the planning and carrying out of the Conference. All participants looked forward to a Third Annual Conference in 2001.

Responses from team-members to the questionnaire distributed by the Yale-New Haven Teachers Institute were more uniformly positive than those after the First Annual Conference, and several shared the view that "this conference was stronger than last." One Director said:

The reactions of our team to participation in the Conference were overwhelmingly positive. . . . The persons who conducted the break-out sessions were generally well prepared. I found the session with representatives from New Haven to be very helpful as we talked about publicizing the seminars and disseminating the curriculum units.

Another Director said:

The Conference was inspiring and instructive. Our teachers got to see that the Institute is part of a bigger thing (four new teachers came), and they learned more about the tasks of being a Coordinator, Teacher Representative, and seminar Fellow. The faculty got clarification on the multiple goals and special nature of the seminars. I am particularly pleased about the clarification the faculty received. The break-out sessions were very useful, as was the first or opening plenary session.

This Director later said: "We have been impressed by the Yale team's increasing openness and willingness to be one of five sites, rather than the one main site circled by four satellites."

A third Director said: "I found the Conference to be both entertaining and profitable this year. Directors did manage to exchange ideas even without meeting exclusively among ourselves." This Director found Jean Sutherland's account of the Yale-New Haven annual process to be especially helpful. And a fourth Director, who found the conference "very worthwhile and enjoyable," said: "I think we are getting better and better at the planning of the thing. Maybe by next year we'll get it just right."

A school teacher said:

The Conference was very useful and quite a shot in the arm for me. . . . Meeting new people from different Institutes and sharing ideas with other educators is exciting and rewarding. Teachers have so much to give to each other, and the Institute uses this concept well.

This teacher added that most of the break-out sessions "could have benefited from a bit more structure and focus." They "were really an intellectual free-for-all with some inspired commentary, but they tended to drift off the topic."

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—School Teacher

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Another teacher, however, found the breakout sessions "useful," the plenary sessions "well-chosen," and the speakers "excellent." And yet another said: "I thoroughly enjoyed the break-out sessions format. It allowed for stimulating discussions. I particularly enjoyed 'Setting Up Institute Centers in Schools.' These centers are extremely necessary for Teachers Institute promotion as well as serving to afford help to individual teachers when writing their curriculum units." Yet another teacher said, "Some excellent ideas surfaced in the discipline session on fine and performing arts."

Several teachers were grateful for the informal conversations with people from other sites. One said:

This Conference did focus on sharing information with the other demonstration sites so that we could all grow, in our own unique fashion, together. As a result of the tone and temper of the sessions an openness and interest in each of the demonstration sites became a true concern to all of us, with efforts directed at problem solving and supporting the efforts at each site.

Another said: "As a team we became more solidified and at one with the interests of the parent group at Yale-New Haven. I expect we will be implementing a number of the new ideas we have gained here." And another said: "Each site has its own style, but I noticed a unified sense of purpose that permeated each group and the Conference as a whole."

One university faculty member found the "mix of participants" to be "good." "Overall," he concluded, "this is the best conference of this group I've attended. It reflects maturing of experience at all sites and speaks well for future inter-institutional cooperation." Another university faculty member said: "One of the main factors contributing to the success of the conference was the quality of the participants. Nearly every one was an excellent speaker. All were well prepared. And they all displayed an infectious enthusiasm." This faculty member also said that the two break-out sessions on curriculum units "were extremely helpful to me in understanding what I need to be doing when I assume responsibility for a seminar next spring." Another faculty member, who found here a "useful pooling of experience and ideas," would have wished "more discussion on the dissatisfactions expressed in muted fashion with the idea of strong teacher leadership; Also more on how the sites can work productively together from here on out."

More suggestions this year than last were offered for the next Annual Conference. A university faculty member urged that it would be good to have "senior school district administrators present, on a panel, saying what they like about the Institutes and what improvements might be made." Several teachers suggested there might be two "tracks," one for first-time attendees and one for those already experienced in the workings of an Institute. Several teachers suggested that the issue of "assessment" should be more fully discussed. Several

would like more whole-group discussions. One teacher urged that each Teachers Institute actively recruit a school librarian to participate in the Conference. One urged that there should be more discussion of Institute Centers, on gaining the support of a principal, and on the role of the seminar Coordinator. And a Director suggested that there be "serious discussions about the future of the Institutes that have been established at the four demonstration sites." Several of the participants urged that there be an early face-to-face meeting by the committee that will plan the Third Annual Conference; and this in fact will take place in the spring of 2001.

There were also ideas for other kinds of future activity. One teacher suggested that if a site tries a mentoring project or changes the way in which teachers are helped with the curriculum units, this might be put on an e-mail list to the Directors of the other sites. Another came away "with the idea that our Institute needs to do more to publicize itself to our school principals and school administrations." This teacher intended to write to her own principal and send a copy to her superintendent. "I want them to know what a valuable experience I had at Yale, and what a joy it is to be a member of our own Institute."

During the Conference, both the National Steering Committee and the National University Advisory Council held meetings. (For membership in these groups, see Appendix.) The Steering Committee decided to meet with the University Advisory Council during April 2001 to discuss the planning for the Third Annual Conference in the following October. It decided also that it should then discuss the survey of curriculum units to be undertaken by the new Teachers Institutes before their Final Reports, the results of the Fellows' questionnaires administered in 1999 and 2000, and ways in which these Teachers Institutes might assist in disseminating the National Project. The National University Advisory Council decided that it would encourage and assist with the establishment of local University Advisory Councils. It believes that such local Councils can serve to advise the directors, promote the Institutes among their faculties and administrations, and assist in fundraising. The National University Council also decided that it would be advantageous for all of the Councils to be able to work together as a group. After the Conference James Vivian suggested to the Directors that these two national committees, in a face-to-face meeting, plan the Third Annual conference. Helen Faison, who had earlier been unable to accede to the Directors' request to be the Director-at-large on the planning committee for the Second Annual Conference, has agreed to serve in that capacity with these two committees next year.

The Implementation Team for the National Demonstration Project also met after the Conference to assess its results. The Team thought the Conference to be more substantive in its presentations than the First Annual Conference and more indicative of growth and maturing at the demonstration sites. It noted that these sites were discovering through their own work the necessity for some procedures upon which we had earlier insisted without

All sites seem prepared to include reference to state and district standards in the curriculum units. They regard assessment of student work as a matter of educational and political urgency, perhaps crucial to the long-term viability of a new Institute; though there is disagreement about the most significant and appropriate measures of assessment.

complete success. It agreed that a major area of concern was the issue of standards and assessments. All sites seem prepared to include reference to state and district standards in the curriculum units. They regard assessment of student work as a matter of educational and political urgency, perhaps crucial to the long-term viability of a new Institute; though there is disagreement about the most significant and appropriate measures of assessment. The Implementation Team also noted that there was still some evidence at certain sites of inadequate communication with the university, the school district, or school teachers; and some problems resulting from condensed scheduling of seminars and inadequate attention to the writing process.

The Implementation Team also noted some of the ways in which the Yale-New Haven Teachers Institute has been gaining from the National Demonstration. There is a heightened awareness of the need to explain our own procedures and to reflect more fully on our operations. And there is a recognition that we need to get our own story out more fully in various ways—through fuller use of hand-outs, CD-ROMs, and student work; through greater contributions to school profiles, and through the work of the Centers for Curriculum and Professional Development.

The Work of the Four New Teachers Institutes

Throughout this year, as last 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 monitoring and advising on budgetary and organizational matters. Director Vivian has been responsive to many questions and difficulties of a more wide-ranging character. Contacts have continued between teachers and faculty members on the Implementation Team with their counterparts at various sites. Site visits have provided first-hand information from university and school administrators as well as teachers and faculty members. And the annual narrative and financial reports of the four new Institutes have set forth their challenges and accomplishments during this second year of implementing the National Demonstration Project. In its third Annual Report to what is now the Wallace-Reader's Digest Funds, the Yale-New Haven Teachers Institute has described its monitoring and technical assistance in considerable detail. Here we offer a condensed account of the continuing experiences of the new Institutes.

Pittsburgh Teachers Institute: This Institute, bringing the resources of Chatham College and Carnegie Mellon University to a selected portion of a school district that now has 97 schools serving 39,000 students, has been working with 20 elementary, middle, and high schools, representing the three regions of the district. The Director, Helen Faison, an experienced teacher and school administrator and former chair of the Education Department at Chatham College, had been relieved of her duties from July 1999 until June 2000 in order to assume the position of interim-Superintendent of Schools in Pittsburgh. During that period John Groch, Assistant Professor of

Communications at Chatham College, served as Acting Director. Helen Faison, who stayed in close touch with Institute matters, has now returned to the directorship.

In 2000, the Pittsburgh Teachers Institute offered six seminars for 48 teachers (with 38 published curriculum units): "Pittsburgh Writers" (James Davidson, Adjunct Professor of English, Carnegie Mellon University); "Interdisciplinary Views of Pittsburgh History" (Steffi Domike, Visiting Professor of Art, Chatham College); "Learning Physics through Science Fiction" (Richard Holman, Professor of Physics, Carnegie Mellon University); "American History through Art" (Elisabeth Roark, Assistant Professor of Art, Chatham College); "Proof in Mathematics: Origin, Practice, Crisis" (Juan Jorge Schäffer, Professor of Mathematical Sciences, Carnegie Mellon University); and "Religion in American Society" (Janet Stocks, Director of Undergraduate Research and Associate Provost of Academic Affairs, Carnegie Mellon University).

Presidents Cohon of Carnegie Mellon and Barazzone of Chatham have said that they would appoint a University Advisory Council consisting of faculty members from both institutions (who would be able to meet both separately and jointly). There continues to be a vigorous core of teacher-leaders. School Representatives and seminar Coordinators have been actively concerned to ensure that both seminars and curriculum units are explicitly correlated with the "62 Pittsburgh Content Standards" promulgated by the Pittsburgh Public Schools. This Institute is also exploring how its offerings may visibly contribute to the district's curricular priorities.

It provides the Fellows, for example, with a document that states how, as they prepare the second draft of their curriculum units, they should begin thinking about the relationship between the unit and national, state, and local standards that all Pittsburgh Public School curricula must meet. This is especially important because the granting of increment credit to teachers based on their participation in PTI is predicated on the assumption that curriculum units developed under the auspices of PTI will address such standards. You will find, we think, that these standards are broad enough so that any unit you might develop this year should be able to address some of them.

Fellows are asked to document the addressing of standards in one or more specific ways. In developing this approach the Pittsburgh Teachers Institute may be of assistance to other Institutes as they define their relations to standards.

This Institute has become an approved provider of in-service courses for the district, and several schools also plan to establish Centers modeled to some degree after those in New Haven, even though there are no funds included in the budget to establish them. Over half of the Fellows intend to participate again in one or more future years, and over a third may also do so.

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Although one of the seven seminars planned for 2000 was withdrawn because of insufficient enrollment, the Institute is confident enough in the demand from teachers that it is advertising eight seminars for 2001. These are: "Media Revolutions" (James Davidson, Adjunct Professor of English, Carnegie Mellon University); "Pittsburgh's Environmental History" (Steffi Domike, Visiting Professor of Art, Chatham College); "Contemporary Latin America: Culture and Civilization" (Karen S. Goldman, Associate Professor of Spanish, Chatham College); "Kitchen Chemistry" (John Hagen, Assistant Professor of Chemistry, Chatham College); "The Math Connection" (Richard Holman, Professor of Physics, Carnegie Mellon); "The Twenties (The Lost Generation)" (Alan Kennedy, Professor of English, Carnegie Mellon University); "Euler's Formula: Space Geometry and Graphs" (Juan Jorge Schäffer, Professor of Mathematical Sciences, Carnegie Mellon University); and "Diversity and Resistance" (Janet Stocks, Director of Undergraduate Research and Adjunct Professor of History, Carnegie Mellon University).

The experience in Pittsburgh (and at other sites) suggests that the initial limitation of a site's scope in the National Demonstration Project to about 20 schools has created an unnecessary obstacle to recruitment. James Vivian is therefore encouraging Helen Faison and the other Directors, as they go forward in planning for the years after 2001, to widen their scope in appropriate ways—that is, by including appropriate types of schools within the partner district, in harmony with the demographics and the aims specified by the Grant. It will be important for the new Teachers Institutes to remain eligible for any further grants that may be made available during the next phase of the national initiative, for that initiative will be proceeding in accord with the Basic Principles already established in the Grant from the DeWitt Wallace-Reader's Digest Fund. It may also be advantageous to the long-term effort if currently non-participating schools are kept on as explicit members of the group.

Significant progress has continued in Pittsburgh despite an unusual number of administrative changes at the sponsoring institutions, including a new Vice President for Academic Affairs at Chatham College and a new Superintendent of Schools. The chief of Staff to the Superintendent of Schools, who is the former Director of Development for the School District, continues to direct the external fundraising. He has directed his staff to search for national foundation and governmental funding that may be available to support the Institute after 2001. And the collaborative relationship among the sponsoring institutions is moving forward, through a joint Carnegie Mellon-Chatham College proposal to the National Science Foundation and a School District proposal to establish a digital school district, in ways that may be of benefit to the Pittsburgh Teachers Institute.

The financial situation appears promising indeed, even though the Pittsburgh Public Schools are experiencing financial difficulties that may result in the closing of a number of schools in 2001 and a sizeable tax increase. A foundation officer has offered to convene a meeting of her colleagues to dis-

cuss the funding of the Institute as soon as the 2001 seminars are under way. Funds have already been awarded by the Grable Foundation (\$140,000 over three years), the Hillman Foundation (\$60,000 over two years), and the Henry C. Frick Educational Fund of the Buhl Foundation (\$60,000 for 2000). Further funds have been requested of the Alcoa Foundation, the Frick Fund of the Buhl Foundation, the Heinz Endowments, the McCune Charitable Foundation, and the Pittsburgh Foundation.

Administrative officers from Carnegie Mellon University and Chatham College have informally discussed the broadening of the partnership to include other institutions of higher education in the city. The Pittsburgh Teachers Institute looks forward to establishing itself as a long-term endeavor. As the annual Narrative Report states:

. . . the public school community has begun to think of the Institute as a permanent opportunity that will be available to teachers in the Pittsburgh Public Schools for an indefinite period. Individual teachers perceive the Institute as an opportunity of which they can take advantage in future years when their current obligations are reduced and they can participate in the seminars. This expectation and the knowledge that the full impact of the Institute will not be felt in an individual school nor in the school system as a whole until a significant number of teachers has been involved leads to the need to find the support necessary to continue the Institute beyond the expiration of the implementation grant . . .

Houston Teachers Institute: This Teachers Institute brings the resources of the University of Houston to the Houston Independent School District, where 280 schools serve 212,000 students. It has been working 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. It now is expanding its scope to include five elementary schools close to the University of Houston and to a range of other schools in the district, for a total of about thirty schools. These schools have the same demographic characteristics as those in the initial target scope. First opportunity for enrollment will be given to the teachers from the 20 schools that were originally targeted, before turning to applicants from other schools. Paul Cooke, who had been a Visiting Assistant Professor of Political Science at the University of Houston, is the Director of this Institute.

In 2000 the Houston Teachers Institute offered six seminars for 40 teachers (33 of whom completed curriculum units): "Adolescence and Alienation," (William Monroe, Associate Professor of English); "Global Warming and Air Pollution" (James Lawrence, Associate Professor of Geoscience); "Issues in Creativity" (David Jacobs, Professor of Art); "Critical Analysis of Graeco-

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Roman Myths and Related Contemporary Issues" (Dora Pozzi, Professor of Modern and Classical Languages); "Jazz History: The Art and Its Social Roots" (Noe Marmolejo, Associate Professor of Music); and "Immigration and Latinos in U.S. Society" (Nestor Rodriguez, Associate Professor of Sociology.)"

Although this Institute has continued to deal with some difficult problems of finances and enrollment in its second year, more than half of those completing the seminars in 2000 indicated that they intend to participate in one or more future years; and an additional 30 percent indicated that they might do so. With the expansion of scope for recruitment, the Director estimates that there may be 65 applications from the participating schools, another ten from the elementary schools approached, and another fifteen from HISD's "annual Excellence in the Schools" conference, where the Institute rented a booth. The five seminars now planned for 2001 include: "Shakespeare Alive!" (Sidney Berger, Professor and Director, University of Houston School of Theatre; "Multicultural Works: The Richness of the Drama of American" (Elizabeth Brown-Guillory, Professor of English and Associate Dean of the College of Liberal Arts and Social Sciences); "Figuring the Odds: Learning to Live with Life's Uncertainty" (Michael Field, Professor of Mathematics); "Film and American Values over the Decades" (Cynthia Freeland, Professor of Philosophy); and "World Order: What Current Events Tell Us About World Politics" (Joseph Noguee, Professor Emeritus of Political Science). A sixth seminar, "Science, Witchcraft, and Politics," to be led by Ross Lence, Professor of Political Science, has been cancelled because of his unexpected medical leave, and the teachers have been distributed among the other seminars.

The Institute continues to rely upon a vigorous group of Teacher Representatives, who meet regularly to carry forward its work. They plan additional recruiting in schools that have not yet been reached, and have paid close attention to the Fellows' responses to the Questionnaire for 1999 in planning this year's program. The Director has arranged for Teacher Representatives to receive professional development credit for their involvement in the Institute. Ted Estess, Dean of the Honors College, and Sam Lasseter, Director of Corporate and Foundation Relations, as well as a core of committed faculty members are offering assistance. Vigorous and self-critical, the Houston Teachers Institute is well supported by faculty members and the school district, and it illustrates the advantages of continuity on all levels.

While acknowledging the difficulties experienced by some of the Fellows in writing curriculum units, Paul Cooke has written eloquently of the complex place of these units within the larger goals of a Teachers Institute:

As Director I have learned that it is most important that all participants recognize especially that fostering love of learning and collegial faculty relations is a chief goal of the Institute. If this less-tangible goal is accomplished, the development of the more-tangi-

ble products of the Institute—the curriculum units the teachers create to enable their students to benefit from their experiences—will flow from the Institute program far more effectively. This is why it is important to emphasize the curriculum units' place in the greater sphere of the entire Institute program. . . . But the intangible benefits of the Institute program—lifting of morale, increasing expectations of students, renewal of the teachers' sense of calling as teachers—are at least as important as the tangible products. It is also important to reiterate that the intangible products arise chiefly through teachers pursuing the task of finishing the obvious tangible product, the curriculum unit.

In discussing the future of this Teachers Institute, he has said:

We believe that many of the key tenets of the Yale model should definitely be retained here and we would resist any effort to seriously modify them. These tenets include: 1) university-school-teacher collegiality, 2) the production of a curriculum unit requiring several drafts and a lengthy period of study, 3) teacher leadership in organizing, recruiting, and administering the seminars, 4) teacher involvement in choosing seminar topics, seminars that meet regularly, have a maximum of a dozen or so teachers, and continue over a rather long period of time, and 5) publishing the work of the teachers.

Director Cooke has been ardently pursuing possibilities for funding in future years and has drafted a proposal to continue support of the Institute for a second three-year term, from 2002 to 2004. He is thinking about the implications, in the near term, of expanding the scope of the Institute from 30 schools to 40 or 50. Important gifts from the Houston Endowment (\$150,000 over three years), the Powell Foundation (\$30,000 over the next three years), and the McNair Foundation (\$5,000), as well as continuing support from the school district, have helped to ease the financial situation. There is also an application to the Arthur Vining Davis Foundations (for up to \$150,000) to which the Foundations will respond in the summer of 2001.

The Superintendent of the Houston Independent School District, Roderick R. Paige, is assuming in 2001 the position of United States Secretary of Education. Susan Sclafani, Chief of Staff for Academic Operations at the district, who has been a strong supporter of the Institute, will accompany him to Washington. Before they left, the Houston Independent School District was committed to continue the same level of support of \$50,000 a year for the next three years after the Implementation Grant has expired. It also exploring ways to increase funding through the professional development budgets allocated to each school. As a further sign of institutional collaboration, the University of Houston has extended a comparable commitment for the same period after the expiration of the current Grant.

Albuquerque Teachers Institute: This Institute, bringing the resources of the College of Arts and Sciences at the University of New Mexico to a district that serves 85,800 students in 121 schools and enrolls a high percentage of Hispanic students from low-income families, had targeted 21 middle and high schools where the problem of a high attrition rate is most serious. Two new schools were added this year to the service population: Sandia High School and the Career Enrichment Center. In 2000, the Albuquerque Teachers Institute offered six seminars for 51 teachers (49 of whom completed a curriculum unit): "Atomic America: Technology, Representation, and Culture in the 20th Century" (Timothy Moy, Assistant Professor of History); "Human Decision-Making: Rational and Irrational" (Kate Krause, Assistant Professor of Economics); "The Indo-Hispano Cultural Legacy of New Mexico" (Enrique Lamadrid, Assistant Professor of Spanish and Portuguese); "Weighing Environmental Risks: Uncertainties and Variables" (David S. Gutzler, Associate Professor of Climatology, Department of Earth & Planetary Sciences); "The United States of America: The Ideal and the Reality" (Fred Harris, Professor of Political Science); and "Literature and the Environment" (Gary Harrison, Associate Professor of English).

The directorship at this Institute has undergone a series of changes. Planning Director, Laura Cameron, who had attended the sessions in New Haven designed to prepare directors, at first served as Co-Director with Wanda Martin. Both are on the University of New Mexico faculty. From mid-1999 to mid-2000, Wanda Martin was joined as Co-Director by Doug Earick, a science teacher in the Albuquerque Public Schools. As of July 2000, Martin was given a position as Associate Dean of the Liberal Arts College, and Earick, with the approval of James Vivian, was appointed Director. At the same time, Michael Fischer, Dean of the College of Arts & Sciences, who has been a key supporter of the Institute, departed for another university.

The Institute continues to experiment with schedules that may meet the desires of the teachers and also provide adequate opportunity for reading and writing within the seminar period. Because of complaints that the compressed schedule makes it difficult to do the seminar reading and write a substantial curriculum unit, and also makes it difficult for Fellows to share their writing-in-progress, the seminars for 2000 were extended from three to four weeks. The Institute will offer one seminar in 2001 that will begin in March and will finish in May. If this seminar does well, more seminars may be offered in the future with a similar schedule. During 2000 a workshop on writing the curriculum unit was very beneficial but may have led to the withdrawal of some teachers. Because of the substantial attrition in 2000 between the admission of Fellows to the beginning of the seminars, it is a goal for 2001 to make sure teachers understand the time and work commitment in advance of application.

Despite these problems, the Albuquerque Teachers Institute plans eight seminars for 2001. They include: "Gods, Heroes, Myths: The Legacy of Ancient Greece" (Monica S. Cyrino, Associate Professor of Classics and

Chairperson, Department of Foreign Languages and Literatures); "When the Good Go Bad: Why Juveniles Become Delinquent" (Paul Steele, Associate Professor of Sociology); "Braque to Bach to Bohr: Physics and the Arts" (Colston Chandler, Professor of Physics and Astronomy); "Math and Reality—An Investigative Approach" (Adrianna Aceves, Lecturer in Mathematics and Statistics, and Cathy Gosler, Lecturer in Mathematics and Statistics); "Spirit of the Rio Grande/Rio Bravo: Culture, Environment and Bioregionalism" (Enrique Lamadrid, Associate Professor of Spanish and Portuguese); "The South Valley, the Environment and Future Development" (Teresa Cordova, Associate Professor, School of Architecture and Planning); "Media Literacy: An Examination of the Effects of the Media on Youth" (Michael McDevitt, Assistant Professor of Communication and Journalism, and Bob Gassaway, Associate Professor of Communication and Journalism); and "Science, Technology, and Society: Forces of Change" (Timothy Moy, Associate Professor of History).

Although during 2000 there were some uncertainties with regard to long-term funding, both the University of New Mexico and the Albuquerque Public Schools have reaffirmed their intention to support the Institute after the expiration of the Implementation Grant. The school district is decentralizing its support for professional development, redirecting the funds to individual schools and clusters of schools. It intends help the Institute within this new system. Superintendent Bradford Allison anticipates, however, that with the appointment of a new Director of Professional Development there will be a "closer and stronger tie between ATI and the district's overall teacher training model." He states that the district "would like to expand participation in the ATI and focus the seminars on district priorities."

The University's special legislative request in 1999 and 2000, which if granted would have divided funds requested from the state for professional development between the College of Education and the College of Arts and Sciences, will not be renewed for 2001. President William Gordon, however, has stated that the University will continue to provide financial support for a number of years, and he is seeking additional funds for that purpose. The University will contribute \$75,000 to the support of the Institute during 2001.

The William Randolph Hearst Foundation had previously awarded the Institute a grant of \$42,500. A grant was received from the Arthur Vining Davis Foundation of \$150,000 for the period from June 2000 through December 2002. The Director will also be seeking support from the Principals' Discretionary Fund, the Albuquerque Foundation, and local businesses.

UCI-Santa Ana Teachers Institute: To Santa Ana, a city with 51 schools now serving 59,000 students, a majority of whom have only a limited knowledge of English, 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 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.

Barbara Kuhn Al-Bayati, the Director, was formerly the Partnership Liaison in the Center for Educational Partnerships at the University. In 2000, the UCI-Santa Ana Teachers Institute offered seven seminars for 70 teachers (62 of whom completed a curriculum unit): "The Natural History of Orange County" (Peter J. Bryant, Professor of Developmental and Cell Biology); "U.S. Literary Culture and Globalization" (John C. Rowe, Professor of English and Comparative Literature); "What Are the Chances of That? Probability in Everyday Life" (Amelia Regan, Assistant Professor of Civil and Environmental Engineering); "The Hardy Personality in Theory, Research, and Practice" (Salvatore Maddi, Professor of Psychology and Social Behavior, and Deborah Khoshaba, Director, Program Development and Training, Hardiness Institute); "Teaching Religion Critically" (John H. Smith, Professor of German); "Inventing America" (Michael Clark, Professor of English and Comparative Literature; Jacobo Sefami, Professor of Spanish and Portuguese; and Steven Topik, Professor of History); and "Impacts of Computer and Networking Technologies on Education" (Stephen D. Franklin, Assistant Director, Office of Academic Computing, and Lecturer in Information and Computer Science).

As at other Institutes, there is here an increasing emphasis upon explicit linking of the curriculum units to State standards. But unlike other Institutes, this Institute also places an emphasis upon preparing students for matriculation at one of the State institutions. This is in accord with an aim of the Center for Educational Partnerships, with which the Institute retains very close links. The Institute intends to track from this point of view the progress of students in classes whose teachers have participated in the program.

The UCI-Santa Ana Teachers Institute has developed a list of thirteen possible seminars for 2001, from which ten will be selected for presentation. The Institute anticipates for next year an enrollment of about 100 Fellows, and there is an expectation of continued growth.

The Institute has a committed group of seminar leaders and Coordinators, and group of 20 Teacher Representatives. The faculty leadership is potentially very strong, and there is administrative support in the University and the School District at the highest level. Former Vice Chancellor William

Lillyman (now Advisor to the Chancellor) has stated that there should be no problem in obtaining necessary financial support from the University 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 Institute. And both Lillyman and Assistant Vice Chancellor Juan Lara have spoken of the possibility of later expansion through the university system of California.

National Accomplishments

The Annual Report for 1998 had given an 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 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. The Annual Reports for 1999 and 2000 have updated the progress at each of these Institutes, noting some of the major challenges and accomplishments at each.

Here we summarize briefly the most important accomplishments of the National Demonstration Project as a whole and note some of their implications.

The Project is already showing in four different cities larger than New Haven

- that a Teachers Institute serving approximately 20 schools that enroll predominantly minority students 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, encourage their use of new technologies, 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 arts college, a private university emphasizing the sciences, a flagship state university, and a major state university in a larger system;
- that high-level administrators in school districts, superintendents or their immediate subordinates, will be attracted by the idea of

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such an Institute, will start thinking about the local means of scaling-up, and will commit themselves to its long-term support;

- and that the strategies employed in establishing the National Demonstration Project, including National Seminars and observation of local seminars in New Haven, are admirably suited for the process of further disseminating the Yale-New Haven model and establishing a nation-wide network of Teachers Institutes.

We anticipate that on its completion the National Demonstration Project will have shown the importance of the principles upon which these Institutes are based. We also hope that it will have also shown that new Teachers Institutes can sustain themselves after the initial Grant. If so, it will have provided the foundation for the expansion of some Teachers Institutes and the establishment of yet others in cities across the nation. And it will have shown that such Teachers Institutes can make a substantial contribution to the most important kind of school reform in this nation—the improvement of teaching itself.

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. Substantial groups of faculty members are learning the importance of Institute procedures and are assisting in the operation of the Institutes. At all four sites, top-level administrators in institutions of higher education have pledged to assist in the seeking of funds. At three sites they have pledged university financial support in addition. At three sites, school districts have made a substantial financial commitment. And at two sites, 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 have been for the most part roughly equal; at Houston the district has been of primary assistance; and at Pittsburgh outside funding has been of greatest importance.

At each Teachers Institute one or more seminars have emphasized local history, literature, geography, architecture, ecology, or economics. All four Teachers Institutes are also paying close attention 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 there has been a special effort to see that both seminars and curriculum units are in accord with the district academic standards. And the other Teachers Institutes are placing an increasing emphasis upon making explicit the ways in which each curriculum unit relates to district standards.

The prospects for longer-term scaling-up also look very good at this point, and the four new Teachers Institutes already point toward some of the 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 professional development that are appropriated to each school as a means to assist the Institute. Superintendent Allison in Albuquerque has pointed to the same possibility.

In Pittsburgh, two institutions of higher education have established a consortium that can serve as a model for expansion elsewhere. 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. Superintendent Roderick Paige of Houston has made the point that scaling-up within an urban area need not mean simply an increase in the number of seminars; it might be accomplished through various ways of assisting more fully the priorities of the district. The proposal by the Yale-New Haven Teachers Institute for a second phase of dissemination, after this National Demonstration Project, calls for a two-year initial period during which the Institutes now established would assess their accomplishments and determine the most appropriate ways of scaling-up within their districts, regions, and states.

As our discussions of the common work have made clear, what Executive Vice Chancellor Lillyman of the University of California at Irvine called last year a valuable "interchange among sites across the nation" continues to be a major objective of the National Demonstration Project. As the increasing collaboration evident in the First and Second Annual Conferences, the establishment of web sites, and the intensive planning next April for a Third Annual Conference have indicated, this is also an important area of national accomplishment. University and school officials, not only teachers and faculty members, now want ongoing opportunities to work together and to learn from each other.

A substantial momentum impels the Institutes at all five cities to work more closely as the nucleus of a nationwide network of Teachers Institutes. The interest shown in the Proposal developed by the Yale-New Haven Teachers Institute for the continuing development of such Institutes through a national association has been very heartening in this respect.

Learning in New Haven

We have noted in the Annual Reports of 1998 and 1999 that we have become increasingly convinced that there is no substitute for direct observation and

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participation in the process of getting acquainted with the principles and practices of the Teachers Institute. We have 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 Second Annual Conference gave us as a group and as individuals a yet clearer sense of participating in a far-reaching collaborative endeavor.

We also continue to pay attention to the need for revisions in the Request for Proposals that might be made in connection with a further project on a national scale. We now more fully appreciate that various elements of the Institute approach are intricately intertwined and that they all seem necessary. Sites should probably be asked to adopt more of the structures for teacher leadership and faculty influence that we have developed in New Haven. This might include requirements for a body of Teacher Representatives, suggested schedule of meetings, the nature of the canvassing of teachers for seminar topics, and the establishment of a faculty advisory council. We may also have to spell out more fully the responsibilities and functions of the Director of an Institute, and the minimum length for the "long-term" seminars.

As we have confronted transitions at several Teachers Institutes, we have been developing procedures that should be followed in naming a new Director. These procedures essentially mirror those that would be followed in New Haven, as set forth in our Policies and Procedures. We would require that teacher and faculty groups play a key role in identifying, interviewing, and selecting a new Director. This would be an open process that is advertised in some fashion. And the recommendation would ultimately have to be made by the individuals (President and Superintendent) to whom the Director must report.

We have also discovered, as we have noted earlier, that we have needlessly limited the target scope of a new Institute and should provide more flexible guidelines here that permit expansion as necessary. And we have realized more fully that the strategies for attaining systemic impact at the various demonstration sites will likely differ from those in New Haven. We continue to believe, however, that the Centers for Curriculum and Professional Development in New Haven may suggest a useful starting point for efforts in other Institutes to have an influence beyond the seminars themselves. We are heartened by the interest that has been shown in them by the Pittsburgh Teachers Institute and the UCI-Santa Ana Teachers Institute.

Finally, we believe that we must devise additional ways to bring Directors, teachers, and faculty members into a working understanding of Institute procedures over the longer term. Despite the success of our orientation sessions and our July Intensives, we need continuing ways of reaching those who enter into an Institute's activity after its inauguration, and we think that this need is especially apparent in the case of the expanding pools of faculty members.

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. This issue took stock of the entire movement of university-school partnerships over the past fifteen years. The Editorial 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* has great potential as a means of disseminating their experience and their results to a wider readership of those interested in university-school partnership.

Because funding had not been received for this purpose, no further Number of *On Common Ground* was published during 1998 and 1999. Funds for its continuation are still being sought. Plans were laid during 2000 for Number 9, however, to be published during the year 2001. This special Number will deal with the National Demonstration Project and the promise of this kind of work for the future. 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. It will also include articles from a faculty member and a teacher at the Yale-New Haven Teachers Institute.

Looking Toward the Future

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 four-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-Santa Ana).

In early 2000, it was decided to propose a fairly modest plan of expansion, involving perhaps two additional sites per year for several years. Discussion with President Richard Levin and others, however, encouraged us to think that we might make a more ambitious plan. During the spring and summer, therefore, the Executive Committee of the University Advisory Council developed a Draft Proposal for the establishment over a twelve-year period of as many as 45 new Institutes. These would be located in as many of the fifty states as possible, so that they might have the maximum influence upon state and national policy. This Draft Proposal was the basis for discus-

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sions by the National Advisory Committee and the meeting of University and School District Administrators with President Levin. The groups firmly endorsed the desirability of such an ambitious proposal, but they urged that the larger effort be preceded by two years of consolidation, intensification, and preparation on the part of all five of the existing Teachers Institutes.

A revised Proposal describes a fourteen-year initiative that includes a two-year preparatory phase.

A revised Proposal has therefore been drawn up, which describes a fourteen-year initiative that includes a two-year preparatory phase. During the first two years each of the four new Teachers Institutes would be asked to discover the most appropriate ways in which they could begin to have a larger systemic effect within their own districts. All five Institutes would be conducting research into the results of their programs. And the Yale-New Haven Teachers Institute would be gearing up for the longer effort, to be supported by the other Teachers Institutes, to establish over the next twelve years as many as 45 new Institutes. President Levin and officers of the Yale University Development Office are currently seeking funds for all or parts of this initiative.

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 feed-back on the usefulness of each meeting and will 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 during service as a National Steering Committee Member.

3. Attends and comes prepared to meetings of the National Steering Committee.

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

Members of the Steering Committee for 2000 include Marge McMackin of the Pittsburgh Teachers Institute, Ninfa Sepulveda of the Houston Teachers Institute, Martha Bedeaux of the Albuquerque Teachers Institute, and Mel E. Sanchez of the UCI-Santa Ana Teachers Institute. During 2000 the Committee worked with a special planning committee to organize the program for the Second Annual Conference in October.

National University Advisory Council

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 mutual 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.

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

Members of the National University Advisory Council for 2000 include James Davidson of the Pittsburgh Teachers Institute, Cynthia Freeland of the Houston Teachers Institute, Kate Krause of the Albuquerque Teachers Institute, and Thelma Foote of the UCI-Santa Ana Teachers Institute.

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During 2000 this Advisory Council also worked with the special planning committee to organize the Second Annual Conference. At its meeting during that Conference, it urged that Faculty Advisory Councils be established at each of the demonstration sites.

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 included within 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 internal documentation and evaluation at each site become 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. 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, which have been summarized in our Annual Report for 1999 and in the Brochure for the National Demonstration Project, spell out in detail the necessary contents of these reports.

The first report from each Institute, 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. The report for 2000 includes continuing description of the Institute's activities and progress. Each report also contains a summary of the accomplishments and impact of the demonstration thus far, the impediments encountered, the unanticipated outcomes, and the lessons learned.

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These annual reports are designed to have great usefulness for each of the demonstration sites in their local management, planning, and fund-raising. They provide information for our own Annual Reports and for the annually revised Brochure for the National Demonstration Project. They inform us in our daily work with the new Institutes by alerting us to significant accomplishments, issues to be faced, and the need for special visits. These reports regularly provide background for our annual site visits, which focus (with varying emphasis from year to year) upon all aspects of the operation of the new Teachers Institutes, including their administration, their funding, their development of teacher leadership, their planning and carrying out of the seminar program, and the writing of the curriculum units.

The information gleaned from this documentation is also used for annual conferences and directors' meetings, which provide continuing conversation among the sites and enable comparison and revision of the demonstrations in progress. And it informs the dissemination by the Yale-New Haven Teachers Institute of the results of the project.

The contracts with the partnerships sponsoring the new Institutes specify that at least once during the grant period, a report will include a survey of the use of curriculum units by Fellows and non-Fellows in the school system. It was agreed at the directors' meeting in 2000 that this survey would take place in 2000-2001 and would be included in the final narrative report. That final narrative report from each site will summarize the three-year 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.

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External Evaluation

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. This evaluation is described in the Annual Report of 1999 and in the Brochure for the National Demonstration Project.

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 new Teachers Institutes provide the evaluators from Policy Study Associates with full access to their activities and their documentation, including school and university personnel and sites. Policy Studies Associates is making annual site visits to the new Institutes, and it is providing reports on those visits to those Institutes and to the Yale-New Haven Teachers Institute. 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.

FINANCIAL PLANS

For the local program, the Yale-New Haven Teachers Institute is currently seeking funds that might be used for seminars in either the humanities or the sciences. Its major long-term need is for an endowment that would provide continuing support for seminars in the sciences. The existing endowment for the Teachers Institute is limited to support for seminars in the humanities, and the teachers' expressed need for seminars in the sciences has increased dramatically in the last few years.

On the national level, the Teachers Institute has developed an ambitious plan for a fourteen-year continuing initiative that will establish as many as 45 additional Teachers Institutes across the nation. This plan includes, for the Yale-New Haven Teachers Institute and those new Institutes that wish to continue as part of this initiative, a two-year phase of assessment and preparation, followed by a twelve-year implementation phase. During the two-year preparation phase, funds will be needed to support planning grants that will enable the existing new Institutes to:

- ascertain how they might most advantageously scale up or otherwise have an important systemic effect within their districts, regions, or states;
- develop a research agenda that will provide information in support of these plans;
- and initiate efforts in these directions.

Funds will also be needed to enable the Yale-New Haven Teachers Institute to:

- engage in similar planning and research with respect to the process and the likely effects of this initiative;
- distill what has been learned during the National Demonstration Project about the process of creating new Institutes;
- reconfigure its staff and phase in the staff for a new national association of Teachers Institutes;
- and explore possible alliances that could assist with administration or management during the implementation phase.

During the twelve-year implementation phase, funds will be needed to:

- establish a national association of Teachers Institutes, with a Director, appropriate staff and technical support;

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- provide renewable Implementation Grants for the Teachers Institutes already established, in order to assure their viability, their scaling-up to serve their own urban sites, and their contribution to the process of establishing new Teachers Institutes;
- enable the Yale-New Haven Teachers Institute and, to some extent, the other existing Institutes, to make initial contacts, carry out visits to interested sites, establish an annual July Intensive in New Haven, and maintain Annual Conferences;
- sustain the publication of *On Common Ground*, which will serve as a means of disseminating information about the progress and results of the national initiative;
- and provide eight-month Planning Grants and three-year renewable Implementation Grants to the new Teachers Institutes being established.

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

The funding described above might best be provided by a partnership between the Yale-New Haven Teachers Institute and one or more major foundations, which would work with us in accomplishing this plan. That funding might be supplemented as necessary by other major grants or lesser grants. The grants might be administered by the partnership, by individual foundations, or by the office of the Director of the national association of Teachers Institutes. The projected cost of the entire initiative is 63.8 million dollars. A detailed break-down of that figure is included in the document prepared by the Institute: "Strengthening Teaching in America's Schools: A Proposal to Replicate Nationally the Successes of the Yale-New Haven Teachers Institute."

CONCLUSION

During 2000, 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 Professional and Curricular Development in the schools (with eleven Centers in operation and a twelfth begin renewed at the end of the year). 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 second year in a three-year process of working with four other Teachers Institutes that looks toward the establishment of a long-term collaboration. This Demonstration Project has begun to create a network of Teachers Institutes across the country that can serve as a model for university-school collaboration. The Institute is now seeking funds to continue the national initiative through a fourteen-year process, including a two-year phase of assessment and preparation, which might establish as many as 45 new Teachers Institutes across the nation. The periodical *On Common Ground* may become a vehicle for the dissemination of the progress and results of this initiative."

APPENDIX

Committees, Councils, and Boards of the Institute

National Advisory Committee

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

University Advisory Council

Honorary Chairman
Howard R. Lamar

Co-Chairmen

Rogers M. Smith
Sabatino Sofia

Executive Committee

Kent C. Bloomer
Gary L. Haller
Mary E. Miller
Jules D. Prown
Cynthia E. Russett
Rev. Frederick J. Streets
Thomas R. Whitaker
Bryan J. Wolf

Members

Bruce D. Alexander
Scott B. Bennett
Murray J. Biggs
Richard H. Brodhead
Richard L. Burger
Robert A. Burt
Jon H. Butler
Edward S. Cooke, Jr.
Sheila L. de Bretteville
Margaret A. Farley
Margot Fassler
Glenda E. Gilmore
Paul Gilroy

Roberto González-Echevarría
Langdon L. Hammer
Susan Hockfield
Fredric L. Holmes
Traugott Lawler
Richard C. Levin
Linda K. Lorimer
Michael J. McBride
A. Patrick McCaughey
Sharon M. Oster
David Pease
Patricia R. Pessar
Leon B. Plantinga
Jock R. Reynolds, III
Margaretta R. Seashore
Ian Shapiro
Jonathan D. Spence
Deborah G. Thomas
Gerald E. Thomas
John P. Wargo
Robin W. Winks
Werner P. Wolf
Robert J. Wyman
Michael E. Zeller
Kurt W. Zilm

Steering Committee

Peter N. Herndon
Carolyn N. Kinder
Jean E. Sutherland

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