Annual Report of

The Yale–New Haven Teachers Institute

1987

Contents

1987 Institute Program 1

Program Development 20

Meeting of the National Advisory Committee 21

National Dissemination 23

Program Evaluation 25

Surveys of Fellows and Other New Haven Teachers 25

Review of Curriculum Units 26

Teachers Who Haven Been Fellows 28

Plans for 1988 and Beyond 29

Campaign for Operating and Endowment Support 30

Research on Individual Prospects 30

Planning for the Long-Term Continuation of the Institute 32

Appendix 34

Yale-New Haven Teachers Institute
1987 Annual Report

This report describes the organization and operation of our 1987 program for Fellows, drawing extensively on the written evaluations submitted by participants; and summarizes recent developments in the dissemination, evaluation, and finance of the Institute, placing those activities in the context of views stated by our National Advisory Committee at their 1987 meeting.

1987 Institute Program

Beginning in the fall of 1986 the fourteen teachers who then served as Institute Representatives canvassed their fellow teachers in each New Haven middle and high school to determine the subjects they wanted Institute seminars to address in 1987. The Representatives reported regularly to the six teachers who served as Institute Coordinators. The Coordinators met weekly with the director throughout this period to compile and discuss the results of the canvas and to make final plans for 1987 offerings. Through this process the Institute determined teachers' most immediate interests in and needs for professional and curriculum development. As a result, the Institute decided to offer in 1987 the following two seminars in the sciences and four seminars in the humanities:

"Human Nature, Biology, and Social Structure:
A Critical Look at What Science Can Tell Us About Society,"
led by Edward H. Egelman, Assistant Professor of
Molecular Biophysics and Biochemistry

"Science, Technology, and Society,"
led by Charles A. Walker,
Raymond J. Wean Professor Emeritus of Chemical Engineering

"The Modern Short Story in Latin America,"
led by Roberto Gonzalez-Echevarria,
Professor of Spanish and Chairman of Spanish and Portuguese

"Epic, Romance, and the American Dream,"
led by Traugott Lawler,
Professor of English

"Writing about American Culture,"
led by Thomas R. Whitaker,
Professor of English

"The Writing of History: History as Literature,"
led by Robin W. Winks,
Randolph W. Townsend, Jr. Professor of History

Acting in its capacity as the Institute's course-of-study committee, the University Advisory Council on the Teachers Institute met on February 19 and approved these six Institute offerings for 1987. By their action, the Institute can certify Fellows' course of study to institutions where they may be pursuing an advanced degree.

A multi-year grant from the Carnegie Corporation of New York supported the 1987 Institute program in the sciences. Seminars in the humanities were supported by a three-year grant from the National Endowment for the Humanities and by the New Haven Foundation, which in March awarded a $25,000 grant in support of the Institute's 1987 program in the humanities. For 1987 the Institute received generous support also from the Bay Foundation, the College Board, the Connecticut Bank and Trust Company, the Ford Foundation, and the Rockefeller Foundation.

Having already worked with teachers in their schools for several months concerning the upcoming Institute program, the Institute Representatives met on January 8 to pick up copies of the Institute application form, brochure, and seminar descriptions, and to discuss strategies for working with their colleagues on applying to the Institute. By the application deadline of February 13 the School Representatives had collected applications from the teachers who were prepared to commit themselves to participating fully in the Institute and who wanted to write curriculum units that were clearly related both to a seminar subject and to school courses they teach. As in earlier years, the objective was to select seminar subjects important for strengthening the schools' core curricula and to shape cohesive seminars so that Fellows would benefit from discussion of work-in-progress on one another's units.

The applications from teachers who wished to participate as Institute Fellows were reviewed by three groups. Subject Supervisors and department heads from the Schools reviewed the applications of teachers from their departments to determine that each proposal was consistent with and significant for the school curriculum. Institute seminar leaders read the applications to examine their relationship to the seminar subject. This afforded each seminar leader the opportunity to enlarge or tailor the seminar bibliography so that it would encompass all the specific interests of teachers actually applying to the seminar. The administrative and faculty reviews pointed up those applications which needed to be refined or expanded. By holding their review in several

sessions over a period of ten days, Institute Coordinators were able to provide the Representatives ample time to counsel applicants about any necessary reshaping or expansion of their proposals. The Coordinators first met immediately after the application deadline to identify problematic applications. In their final, all-day meeting the Coordinators considered the results of the administrative and faculty reviews and the additional information received from applicants and made recommendations to the director about which teachers the Institute should accept.

On March 9 the Institute accepted as Fellows sixty-three New Haven middle and high school teachers, forty-four in the humanities and nineteen in the sciences. Consistent with a central aim of the Institute eventually to involve a high proportion of all eligible New Haven teachers as Fellows, almost one-half (forty-four percent) of these teachers were participating in the program for the first time. This also means that somewhat more than half of the Fellows had participated in the Institute at least once previously, which helps to provide continuity in the program from year to year.

Each seminar held an organizational meeting on March 17 at which the seminar leader distributed a general bibiliography and discussed with Fellows the proposed syllabus of readings which they would consider together. The Fellows described the individual curriculum units that they had indicated on their applications they planned to develop. This provided members of each seminar with an overview of the work they would undertake together and the projects they would pursue individually. The bibiliographies introduced the seminar subject generally and guided Fellows in beginnning research on their curriculum units. Drawing on the bibiliographies, Fellows began to read widely to study the seminar subject and to refine their specific unit topics. The first two months of the program thus afforded Fellows a period during which they read extensively on the seminar subject and intensively on the topics of the unit they were developing. Thereafter, Fellows continued to read about both the general seminar subject and their specific unit topics.

In evaluating this year's program, several Fellows commented, as Fellows have done in previous years, on the value of the reading they did and on the difficulty of completing during the course of the program all of the reading that they wanted to do. Two Fellows stated contrasting views:

> I am very glad that I participated in the Institute this year. I found both the selection of readings and the topic of my seminar interesting and valuable. I'm a big classics/fiction reader. In this seminar we read only non-fiction works so it opened my eyes to a whole new area of interest. (I am presently reading another book, also non-fiction, recommended by my seminar leader.)

> Frustration seemed to develop when I could not complete some of the reading assignments because of their length. Research for the unit also involved intensive reading, and time along with work just did not allow concentration on both research and reading as much as I would have liked.

Before submitting on April 7 a refined unit topic and list of readings to research the topic, each Fellow met individually with his or her seminar leader. The Institute requires a minimum of two such individual conferences during the unit writing period. In many cases Fellows meet more frequently with the seminar leader. Seminar leaders described in their evaluations of the program how they handled these individual meetings. A seminar leader in the sciences wrote:

> I met with each of the Fellows four or more times during the life of the seminar. My role in these interviews was basically one of calling relevant materials and information to the attention of Fellows and reminding them of their obligations to teachers who might use their units in the future.

Two seminar leaders in the humanities wrote:

> I met at least twice with each Fellow--once during the formulation of topics and once before or just after the second draft. About half of the Fellows initiated from one to four other meetings. Each of these meetings (from 30 to 60 minutes each) was congenial and usefully specific.

> I believe I saw every person privately at least twice, and some people more than that. I'd say beyond the first meeting, meetings between us were arranged about half by me, and about half by the Fellow. This year I tried to see everyone once at his or her school, and did so almost.

In evaluating the program, several Fellows commented on the individual assistance their seminar leaders provided. As three wrote:

> [The seminar leader] is a masterful discussion leader. He offered us his home for a comfortable setting in which to meet. He attempted to draw everyone into the discussion, and he listens well. His time for individual meetings was generous, and his comments on my drafts were encouraging and practical. If a goal of our Institute is to be exposed to recent scholarship and critical insight from faculty, [he] makes that goal happen.

> The seminar was conducted in an effective manner. The individual help given us by our instructor was great! I got more individual guidance than I ever received in any graduate class.

> I read at least ten critical studies in preparation for my unit. I met three times with [the seminar leader]; each time he helped me to sharpen and clarify my thinking.... Moreover, he gave me useful feedback after the first draft which helped me to clarify and rethink my writing. We enjoyed very stimulating discussions about the various novels we read, and I learned to improve my discussion skills.

At the second seminar meeting on April 7 Fellows presented their revised unit topics and began to discuss the common readings. Before the regular weekly meetings of the seminar that would begin on May 12, Fellows continued their reading, both preparing in advance for the seminar discussions and working toward a brief prospectus of what their units would contain, which was submitted on April 28. Fellows submitted the first draft of their units on June 2, and the second draft on July 7. The weekly meetings of the seminars continued through July 21 with the completed units due at the end of July.

Institute Guidelines and Mechanical Specifications for writing curriculum units were distributed at the beginning of the program in March. The Guidelines outline the Institute writing process, which has five steps for Fellows' formulating, reformulating, and enlarging their individual units. As in past years, numerous Fellows commented on the value they derived from preparing curriculum units in this way. One said, "This was the first time I have written a curriculum unit and I feel this skill and the unit itself will be very helpful, not only to myself but to others also." A Fellow in the sciences wrote, "If writing helps me think about what I want to teach, perhaps I can use writing to help the students think about what they are supposedly learning." Other Fellows wrote:

> On the whole, I found the Yale-New Haven Institute experience to be extremely positive. My building Representative had urged me to join for several years. My involvement with the Teacher in Space Project along with family health problems had prohibited me from participating until this year. I joined in the hope that I would transform the information and training I had received in space science into a practical curriculum for use in my classroom. The Institute experience not only motivated me, but it provided a disciplined environment that "forced" me to get the job done. I work best under pressure of a deadline. The Institute's approach to writing--to formulate, reformulate, to write, rewrite--was ideally suited to my working style.
>
> I personally worked through many issues of pedagogy with the preparation of the unit. It seems to me that unit-writing enables teachers to experience a

> personal-professional growth--or to deal concretely (and positively) with the very stages of teaching. (Teaching is primarily learning, and concerns change with the accrual of experience.) Thus unit-writing is highly personal--yet immensely profitable for that individual who takes responsibility for the education of young people.
>
> My participating in the Institute this year has been stimulating both intellectually and professionally. Perhaps its greatest effect on me has been that in order to write my unit I had to first assess in writing (for myself): my art program, my thoughts about what is important to teach in art, and the needs of my students in particular. I believe this review will have a profound effect on my approach to teaching this coming year. As a result of my thinking I intend to demand more from my students and present a more structured program encompassing the making of art pieces with responding to artwork.

Seminar leaders, too, spoke about the value, from their perspective, of Fellows' writing curriculum units. One said, "the process is worth while. Several [Fellows] said this was the first time that they had to think in advance and in sustained details about what they were doing in the classroom and why." Another, veteran seminar leader commented on the value of units as finished products: "The written units strike me as, on the whole, very good--considerably stronger than those submitted for the first seminar I taught."

The Institute also believes that the curriculum writing schedule, which overlaps the school year by three months, has the distinct advantage of allowing participants to try out the subject matter and strategies that they may later incorporate in their units. As one Fellow wrote:

> My curriculum unit will be the centerpiece of my teaching in the coming year. Strategies I tried out on my classes last spring proved very effective and I think will be even more so with the additional work the unit represents. My participation in the Institute will affect my teaching, as it has given me a renewed idea of what it's like to be a student and has given me additional knowledge in my field.

In 1985, rather than holding unit-writing workshops for first-time Fellows at the beginning of the program as we had done in the past, we made technical assistance in unit writing available periodically throughout the curriculum-writing period, giving all Fellows the opportunity to meet individually with Institute Coordinators before the successive drafts of their units were due. A week prior to each of the due dates, we scheduled opportunities for Coordinators, who are experienced unit writers, to assist Fellows in interpreting and applying

Institute Guidelines in developing their units. Because this mode of assistance proved helpful in the past two years, in 1987 we again scheduled such opportunities on a weekly basis.

In 1987, however, a higher proportion of Fellows than in recent years were taking part in the Institute for the first time, and in some seminars these first-time participants were in the majority. We have therefore decided to hold in 1988, as we had done in earlier years of the program, a writing workshop for all participants. In addition, we will continue to provide the technical assistance on a weekly basis as we did in 1985, 1986, and 1987. The Coordinators believe this will respond to the suggestions of some first-time participants, such as the 1987 Fellow who wrote: "I wonder if an orientation session for new participants might be helpful. I had many questions, especially about the unit writing process."

During the first two months of the program, all Fellows also met together for a series of talks on Tuesday afternoons after school. Based on the favorable response of Fellows evaluating the program in recent years, the Coordinators decided again this year to ask several of the current seminar leaders to deliver talks. The purpose was to present to all the Fellows either an overview of, or a specific topic to illustrate, the seminar subject. In this way, Fellows became generally acquainted from the outset with the work their colleagues were pursuing in other seminars. The talks which seminar leaders gave were: "Conversation as Design," by Thomas R. Whitaker: "Asking the Right Question," by Robin W. Winks; and "Huck Finn's Odyssey," by Traugott Lawler. Another purpose of the talks is to provide Fellows information on, and to build interest in, the subjects of seminars the Institute may offer in future years. The Coordinators decided therefore to invite two faculty members to give talks on topics in the sciences in which Fellows were known to be interested. Augustus Oemler, Professor and Chairman of Astronomy, spoke on "Understanding the Universe," and Robert G. Wheeler, Professor of Applied Physics, spoke on "Superconductivity and Tomorrow's Technologies."

The talks remain the principal events which all Fellows attend together, which helps to give them a sense of the whole program of which they are members. In their evaluations Fellows expressed an appreciation of some of the other purposes the talks are intended to serve. As one wrote, "I enjoyed tremendously the beginning afternoon lectures and thought they were intellectually stimulating." Even though the Coordinators are committed to continuing the talks for the larger purposes of the program which they serve, the lecture series still is controversial each year with some Fellows. As one wrote, "Personally, I do not like the preliminary lectures. They always seem meaningless and a waste of time, even though so much effort seems to be placed into them."

An impatience with the talks may well arise from the emphasis many Fellows place on the specific use they wish to make of the Institute and

what in very practical terms they can gain by their participation. As two Fellows wrote this year:

> I enrolled in the Institute seminar with a predetermined topic; that is to say, I knew the area I wished to research and to develop into a workable curriculum unit. (By workable, I mean one which could be applied to the classroom easily.) I found the seminar leader extremely helpful in suggesting sources I could investigate. He helped me clarify certain objectives which I was approaching too philosophically. In effect, he forced me to consider structure as well as content, so the unit would be workable as I wished.

> When I applied to the Institute, I had a strong sense of what I wanted to do if accepted. I had been teaching some Spanish literature in the classroom and was (still am) in need of suitable materials for eighth grade students. Even though I don't teach the higher levels, I see the need there is for native Spanish speakers, as well as advanced non-native students of Spanish, for materials which would serve them to further expand their command of the language. Consequently, it wasn't too difficult for me to establish a sense of direction and structure for the unit.

As in past years, during the period of seminar meetings we enlarged the group of Coordinators so that there would be at least one Coordinator in each seminar. This enabled them as a group to discuss each of the seminars and to resolve any problems that arose. To review the progress of the seminars, the Coordinators met weekly with the director, and the seminar leaders met as a group at least monthly with the director. In this way the Coordinators assisted with the smooth operation of the seminars, providing teacher leadership without diminishing the collegial rapport within each seminar.

The Institute continues, as it has from its inception, actively to encourage collegiality within each seminar, that is, to foster a professional relationship among educators who teach the same subjects and who can make equally important contributions to the work of the Institute. The comments of two first-time Fellows illustrate how participants benefit from working on this basis with their school-teacher colleagues.

> Seminar discussions permitted me to be privy to the thought processes with which the other teachers approach their classrooms--the factors they select out for emphasis, the pedagogical concerns they reflect. It is not merely the teaching tips I heard--although those are always helpful--but the priorities reflected by the other teachers, priorities I had not consciously considered sufficiently.

> One additional benefit was meeting many teachers with many different areas of expertise with whom I can exchange information and materials. For me, this is a most important outcome of my participation in the Institute.

A Fellow in the sciences who had participated previously in the Institute wrote:

> My experience in the Institute seminar this year was very pleasant. The seminar leader was always well prepared and had an excellent background in the subject matter. He gave all members of the group an opportunity to ask questions and to express their points of view. The seminar meetings enabled teachers from different schools and subject areas to exchange ideas. The leader and all other members of our seminar were helpful in preparing the units of curriculum.

Another Fellow commented, as many have previously, on the operation of collegiality by commending the manner in which the leader conducted the seminar:

> I loved [the] seminar. It was very challenging, yet flexible. We, as teachers, were very involved in the choice of discussion topics and readings. [The seminar leader] set the agenda, but we were never constricted by his choices. He was very open and all the seminar meetings were filled with meaningful discussions. I learned a lot in a pleasant and pleasing manner.

In their evaluations, other Fellows wrote about their seminar leaders:

> My experience in the science Institute this year was very rewarding. It brought to my attention many things that take place in the body in reference to genetics. My seminar leader was very knowledgeable in the area of genetics, therefore, generating a comfortable atmosphere and a more indepth awareness of the subject matter.
>
> A requirement of the seminar was a written reaction to the assigned weekly readings. The seminar leader never failed to return these assignments the following week with his own written comment. I appreciated the time and effort that it must have taken him. He guided discussion of the readings during the meeting, but never prevented discussion which emerged from it into other related areas. Because almost everyone had, in fact, done the readings, these specific and general discussions were equally rich with thought. In summary, I found myself taught extremely well as an individual, and as a member of a group.

> I was very impressed with my seminar leader. He was very good at keeping our discussions going in a fruitful way. I was especially impressed by his ability to pursue a point, to draw conclusions out of seminar members, and to find connections in what at first appeared to be unconnected observations. Additionally, he provided many insights into our readings. He helped make me more aware of writing styles and the structure of the writings we read.

Reciprocally, the University faculty members who led Institute seminars expressed high regard for the teachers with whom they worked. One said that the Fellows were "all quite fully committed." Another wrote that his was:

> a seminar consisting of committed teachers who were introspective both about the art of teaching and about their chosen discipline...articulate concerning why they teach, and mutually reinforcing of each other and of the seminar's purposes.

In describing the collegial process of his seminar, another seminar leader wrote:

> Members of the seminar were articulate and thoughtful; they brought less immediate book-learning to the discussions than advanced undergraduates within the major do at Yale, and in compensation they brought far more common sense awareness of what the real issues worthy of discussion were. No one tried to score points off anyone else, which made the sessions somewhat less combative but on the whole more productive.

Another said that the discussions in his seminar were "freewheeling," and he speculated about what contributed to this nature of the discussion:

> As I've said before, the major difference between the discussion and the discussion in my seminars at Yale is that the teachers, who are adults with some experience of life, more commonly respond to literary texts in terms of their personal experience, and less in terms of theoretical critical ideas, than younger students do.

Seminar leaders spoke, in fact, of the age of Fellows as one of the principal values for themselves in conducting the seminar. As one wrote:

> The seminars continue to offer me the chance to think through topics and texts with other adults who would often not enter anything like my undergraduate or graduate classrooms. They help to keep me aware of a wider audience and a wider responsibility.

Each seminar must balance two primary objectives: further preparation of teachers through study of the seminar subject, and application of their new learning by development of curriculum units on specific topics for use in their own and other teachers' classrooms. Fellows described how, in practice, they approached these two objectives:

> The seminar was an unequalled experience in the entire range of my education. To be given the opportunity to discuss readings with fellow teachers, under the direction of a professor of [my seminar leader's] caliber, will remain a priceless addition to my knowledge for a long time. Bluntly, I would have paid for the chance to participate, if I could. Describing my experiences is one of those tasks that is difficult because there is so much to tell, that I could never do it full justice.
>
> The readings were provocative and fascinating. The seminar leader provided skilled direction for discussion which dealt not only with the subject of history, but also with the profession of teaching. Such discussions (I feel) resulted in my intellectual and professional growth. In fact, my mind was really "stretched" this year. I don't think I've ever worked more diligently on the preparation of a unit.
>
> My participation in the seminar was terribly positive....Actually enjoying reading history was definitely new to me!
>
> I feel that the Institute as a whole is an excellent means of letting teachers expand their knowledge and look at their teaching methods and curricula. A strength of the seminar meetings lies in the discussions which occur which bring out others' styles of teaching, and constructive criticisms which help shape your unit. One feels challenged in one's knowledge on the topic and in writing the unit. Another strength is having the guidelines from the beginning--knowing when things are due and the structure that the unit should take.
>
> [The seminar] was as successful a seminar as I have ever participated in during my ten years of involvement with the Institute. [The seminar leader] engineered a schedule of readings which were highly logical and which suitably blended important suggested works with works being read for our individual units. I felt that the seminar's success rested mainly upon the open atmosphere in which it was held. Seminar discussions were lively and entertaining.

In their written evaluations of the program seminar leaders described how, from their perspective, each seminar balanced Fellows' work on their own individual units and general study of the seminar subject. One wrote, "I felt balance between general and individual matters was about right." A seminar leader in the sciences said:

> In general, the framework provided by the Institute seems to me to be quite satisfactory. The Fellows obviously welcome the opportunity to develop topics for use in their own classrooms and leave the seminars with lots of ideas for improvements in their teaching. Hence I believe that the basic idea of curriculum units is sound and should continue to be the focus of the seminars. The idea of using seminar meetings for furthering the general education of the Fellows is also sound. Within this framework of curriculum units and seminar discussions it is certainly possible to aid the Fellows in their careers. It is up to each seminar leader to decide on how best to use the opportunities provided by the Insitute, and that is as it should be.

Two seminar leaders in the humanities wrote:

> At some point during the seminar sessions, each person briefly presented her own curriculum unit topic. and at a later point each had up to 30 minutes to present to us in greater detail some aspect of the unit. I tried to correlate these presentations roughly with the common reading being discussed. One entire seminar was devoted to peer responses to the first draft. Copies of the drafts (three per person) had been distributed the week before, together with my form for peer evaluation. Those attending found this very valuable, I think, and seemed to enjoy it.
>
> I think each individual member of the seminar had ample time to devote to his or her unit as well as to the common readings. Also, as I did last year, I reserved the last four weeks for common reading of books that were being done in units by members of the seminar. Of course, not everyone in the seminar had the chance to have their unit topic discussed in this full way, but I think it was beneficial for those who did, and indeed, beneficial for the group.

Numerous Fellows commented on what they anticipated would be the results of the curriculum units that they wrote. In representative comments, four Fellows in the humanities wrote:

> My teaching and American literature curriculum should be much more varied, richer and more effective as a result of

> my participation in the seminar. I will be able to start at the beginning of the school year with a unit fully developed, which will save a great deal of time.
>
> My unit was written by and for me. This is the first time I will be teaching my own material. I am anxious to see what I did right and what goes over well and what may not and learn from my errors.
>
> It is hoped that my unit will be useful to 8th grade teachers using The Western Hemisphere textbook for social studies and maybe to high school U.S. history teachers. Coverage of the Industrial Revolution is lacking in our text, but the elements needed to cause that Revolution are listed and described. The content of my unit will supply the information to put the Industrial Revolution into an historical perspective and address basic questions concerning it.
>
> Several peers have already read my unit and have told me they would like to try to use it in the upcoming school year. I feel their students will benefit as a result of this as much as mine.

Two Fellows in science seminars wrote:

> The effect my curriculum unit will have on my teaching: 1) allow me to try techniques that I do not usually use in my math classroom like group work and specific practice in reading aloud; 2) give me material I'm looking forward to trying with students.
>
> It will help students to meet their needs in math through problem solving by dealing with materials in their world that they will become familiar with. They will develop skills and techniques through hands-on experience. The unit will also help students to develop a positive attitude toward math and school work.

Other Fellows commented on additional ways in which their Institute experience would not be isolated from their teaching, but rather would have an ongoing influence in their professional lives:

> Honestly, I believe this unit has made me aware of the complexity of the technology that I naively dove into. So perhaps the greatest effect is going to keep me working on it for quite some time, trying to learn more about it, and trying to find sensible strategies to present it to my own students. I am developing materials throughout the rest of the summer, and I intend to study more before I use the unit during the second half of the year.

I found participation in this year's Institute seminar both challenging and stimulating. I found myself exposed to new ideas and stimulating conversation. Perhaps more importantly I found myself doing things I probably would have never attempted before. I found myself reading books I never would have attempted before. I have started writing down names of books and buying books to start my own library related to the curriculum I have written. There has been a great deal of personal growth. I am very proud of what I have done. I feel I have tackled a difficult task and have done it well. I will probably take a break for a year or so before applying for the Institute again, but I would definitely do it again.

I learned so much in my research that I plan to extend my unit on a larger scale. I was able to use a portion of my unit during the latter part of the school year. I have already decided when and how I will break the unit up in parts to be used in future classes. Since I work closely with several other teachers in my school, I have already informed them of my plans to incorporate my unit with their lessons.

I believe that my preparation for this unit has caused me to re-think other units I am teaching within a more effective framework. By this I mean that the structuring of my curriculum unit will force me to become more structured in my presentations throughout the school year. I am more aware of University resources than before, and this awareness should allow me to use better sources in other units that I teach. I am hopeful that I will be a more effective teacher as a result of my preparation of this unit. My preparation reinforces my belief that students need to be challenged to learn in new ways that more deeply involve them in the learning process. My unit preparation this summer has led me to a deeper commitment to promoting more inductive, and hence, more productive ways of learning in the classroom.

I suspect I will use the curriculum I write little and the research I did greatly. Spain is a part of the required curriculum and I now feel confident that my students will develop greater depth in their knowledge. Of course it means I will develop more curricula!

Some Fellows who were participating in the Institute for the first time commented specifically on how they had approached the experience and on what they had gained:

> Working on a curriculum unit that I will use in my classroom was a wonderful experience. I entered into this project with quite a bit of apprehension. My seminar leader was very helpful, and although my writing skills still need a great deal of improvement, I am pleased with my final unit.
>
> I wanted to participate in the Yale-New Haven Teachers Institute because my degrees are both in Special Education, and there are gaps in my educational background. The seminar helped me direct my reading, and the discussions shed additional light on the material--a benefit I wouldn't have reading on my own.

Other Fellows who had participated previously in the Institute commented on the benefits of recurring participation. One said, "I think the Institute program gets stronger and stronger. However, that may be because I always find a seminar I like." A Fellow in the sciences said, "I feel that the more that I am involved in the Institute the more effective I become in the classroom." Others wrote:

> Because I've been in the Institute several times before, I felt a little more able to use some of the vast amounts of help available. This takes time for many of us; it takes time to become aware of where we need help and to then be able to ask for it.
>
> This year, I am quite pleased with the progress I made in developing my unit. My instructor and colleagues were very supportive in what I was writing....I am looking forward to the same to occur next year if I am one of the lucky ones.
>
> Probably the most enjoyable and useful aspect of my experience this year was a noticeable improvement in my ability to write to a deadline in a purposeful way, unlike last year.
>
> My experience in the...seminar was a delightful, thought-provoking experience. The opportunity to interact with intellectual personalities was challenging. Although all observations were welcomed during our discussions, I learned very quickly not only to make that observation but also to be able to defend/or to counterdefend that position. I have become a richer man for this experience. I look forward to being invited to participate again next year.

Although the majority of Fellows have participated only once or twice previously in the Institute, a few have participated five or more times. (See page 28, below.) One of these veteran participants wrote:

> This year is my seventh in the Institute. All my units are a part of my curriculum. My newest is going to be used this year, probably after Christmas in one class. As we continue to write and improve our curriculum in my department, as well as my school, I see a greater need for units like mine to become an integral part of our work. I am planning to encourage other teachers to use my unit in further developing our school-wide curriculum.

Numerous first-time participants commented in particular on the results of their participation in terms of their confidence as teachers.

> I was nervous on application that I would find my summer used up and no time left to rest, as I badly needed. I quickly became enchanted to find myself amid an atmosphere of ideas, to find myself once more trying to expand the universe I understood and to be able to express the truths I had discovered. I greatly appreciated the opportunity to read and to learn to understand the topic of my seminar. I had never had an opportunity before to develop confidence in my interpretations. I now feel sure I could teach them.

> Having completed a great deal of independent research and reading on the subject, I feel a great deal more prepared and more at ease with this topic.

> The Institute experience gave me a new sense of what teaching could be. While I'm not suggesting that I'm about to discard all the techniques I've employed through the last eighteen years, the seminars have certainly opened up an attitude in me that was missing before....I now feel more confident, less fearful perhaps, to open up more and draw from many sources, not just the novel being read, or the textbook being studied. The seminars have also taught me that I am capable of thinking about a curriculum in broad ways, and then honing and refining my thinking into an effective course of study for my particular class. My ideas are worthwhile. The seminar allowed me to realize this as I had never realized it before. How could the students in my classes not benefit from my new awareness?

> Certainly I am better prepared to teach the unit as a result of the research I did. There is no substitute for information-at-hand when one is in front of an active, challenging group of young people. In that sense, my participation in the Institute had direct effect.

> One of the biggest effects the Institute has on me is that it increases my sense of professionalism. I feel good about my participation, and I think that this added

> confidence is perceived by the students. As an English teacher, I used the time spent on the unit to think about developing a sense of observation. This sense of observation (on the text) should increase their confidence and their enjoyment of class readings.

Some Fellows mentioned benefits of holding the program on the Yale campus. One wrote, "My experience was personally and professionally rewarding. It was stimulating just to be on the Yale campus." Another said, "My experience on the Yale University campus was one I could never forget. The environment was so conducive to learning."

Other Fellows spoke of the value of their participation in terms of their professional morale. One said, "My participation in the Institute will allow me to return to my classroom with a more positive attitude." Another wrote:

> Participating always lifts my morale. The opportunity to meet, learn with, and discuss curriculum with other teachers in a setting which doesn't foster moaning and groaning is invaluable to me. To say that participation contributes to my sense of professionalism would be an understatement.

One of the seminar leaders expressed a similar view about the value of the Institute to Fellows when he wrote:

> An extraordinarily valuable project for the New Haven School system, as I see more clearly every year....The Institute provides an intellectual and (in the best sense) social component to the lives of these teachers that is sorely needed.

In their written evaluations seminar leaders spoke also of what they themselves gained by participating in the program. One said that, "Yale faculty who offer seminars do so because of the growth experience it will offer them and not for reasons that are in any large measure financial." Another said, "Any effort at clarification and simplification makes one rethink." Two other seminar leaders wrote:

> As always, one grows from teaching those who are in the front-lines of education. Even more, one grows from working as a partner with them. This is the main benefit for the Yale faculty members. A periodical reminder of the realities of public education is useful to anyone who purports to teach, at whatever level. The strengths of the Institute, both for Yale and for New Haven, are thus obvious, and the only abiding weakness is its continued financial instability, a condition to be attributed...in no way to the Institute's leadership.

> One receives financial, social, and intellectual benefits. A major social benefit, and a professional benefit as well, is the chance to learn at first hand how the New Haven schools work. The Institute has given me a much more complete sense of being an involved member of the New Haven community than I had before, and it's just the right sort of involvement--one that brings in my special abilities, and contributes to improving them at the same time. I've also simply made a number of good friends. Intellectually, my ideas on books have expanded from contact with a series of adult minds.

Finally, to conclude this discussion of the 1987 program, in evaluating their experience in the Institute overall, Fellows wrote:

> The experiences were extensive, enlightening, and refreshing educationally. The program is an intellectual awakening!
>
> As always I found my experience with the Institute rewarding in intellectual growth and with the comraderie with Fellow members.
>
> I think participation in the Institute helped me specifically to ready a more refined curriculum unit than I would have otherwise for September, as well as aid me in refining the amorphous background through which one makes multiple decisions while working in the classroom. I believe my teaching behavior has been affected as well. At least, I hope so.
>
> Ten years and still responsive to the needs of New Haven teachers! The strengths of the Institute continue to be the dedicated leadership as demonstrated by the director and teacher representatives. The program's success is due in large part to their organizationa skills, their commitment to public education, and a willingness to seek, reflect and provide for teachers' needs. Of course once underway, the Institute blends well the university faculty's strengths with the teachers' expertise in making a rewarding seminar with collegial atmosphere. This professional experience for teachers is aimed at producting a unit of substance that will be useful in the classroom and that will be shared with other teachers.
>
> In general I am very glad I was able to participate in the program. I feel I have learned and grown from the

experience. I have been reading all sorts of books I never would have selected prior to the seminar. Having access to the Yale community has been an incentive and a welcome bonus to teaching in New Haven.

This was my first year as a participant in the Institute. I enjoyed working with the other teachers, sharing ideas and gained quite a bit from our seminar leader. The talks were ideal and that was an extremely rewarding experience as well. [My seminar leader's] guidance was very helpful in completing my curriculum unit. I hope to participate in the future and will recommend that other teachers become involved.

The Institute's strengths are many, and I will list only those that most impress me. To allow our city's teachers access to Yale faculty and resources is invaluable. The local and high school libraries are very limited, and I have been able to research other topics for class, as well as my unit. The reading list for my seminar was challenging in length but gratifying, and the discussions were enjoyable. I appreciated meeting other teachers who are interested in improving their instruction.

The Institute provides an opportunity for teachers to meet and exchange information on an informal basis. It provides an opportunity to work with professors who are experts in their fields. It gave me some structure and direction in my reading and allowed me to work on my writing skills while receiving helpful criticism and suggestions from my seminar leader.

I believe that the Yale-New Haven Teachers Institute is of a great assistance for the New Haven public educational system. It helps teachers not only to prepare curriculum units in a more efficient manner, but it also helps teachers to keep more informed about current theories and events; besides the honorarium which I consider very motivating.

The overall schedule of the Institute was to be mindful as well as fair. I think the master plan for the effort is very well conceived and executed. Not to mention the library privileges which I think are splendid and a great incentive. As a first-time Fellow of the Yale-New Haven Teachers Institute I am pleased I enrolled and participated. My impression of the level of organization and competence this effort has achieved is one of "thumbs up." As a New Haven public school teacher, I'm certainly happy for the existence of this educational tool.

> I think it is terrific. It is a depressing experience going from the academic world to the public schools where the issues are no longer a search for truth but a bargain for the possible. After a year of memos in triplicate about matters of mechanics, to once again have the luxury of intellectual growth and reflection on the purpose of our work is a life line. After twenty years in New Haven on the fringes of Yale, I have found something Yale does well that helps real people in real life.

Program Development

During the course of their meetings to ensure the smooth operation of the program, Institute Coordinators dealt as well with numerous topics in the evaluation, dissemination, finance, and development of the Institute. With respect to the last area, they explored in particular the potential relationship of the Institute's program to the new Connecticut provisions for the recertification of teachers, which will take effect on July 1, 1988. This new State education policy will require teachers to complete every five years a minimum of ninety "contact hours" or nine "continuing education units" consistent with their individual professional development plans.

In addition, the Coordinators considered further whether or not the Institute should be expanded to include elementary school teachers, but they decided to defer a decision on such an expansion. The Coordinators concluded, in part, that it would be imperative first to involve elementary school teachers themselves in carefully considering this question and what would be, in their own view, the benefits of participating in the Institute as it presently is designed.

In June we completed the preparation of topical lists of the curriculum units Fellows wrote between 1978 and 1986, organized according to the school subjects and grade levels the Institute addresses. For each of the six school departments in the humanities and the sciences, we formed a committee composed in most instances of the subject supervisor, one or two department chairmen, and both a middle and a high school teacher who have participated several times in the Institute. The committees first agreed upon a general outline of the school curriculum for their subjects. They then reviewed the Index of Curriculum Units to determine all of the unit topics related to that curriculum. The resulting outlines of school curricula with reference lists of applicable Institute units will be useful not only to teachers individually, but also to school committees working on the further development of the formal curricula for these six departments.

Finally, in planning for the coming year's program, Institute Coordinators considered seminar subjects for 1988, as well as the personnel and position descriptions for teachers in the leadership of the program.

National Advisory Committee Meeting

The National Advisory Committee for the Teachers Institute met in New Haven on April 20 for a full day of focussed discussions. In advance of the meeting, we sent the members briefing papers and other background material on each of the three topics the Committee was formed to address: national dissemination, program evaluation, and fundraising. We also prepared an executive summary which highlighted the questions on which we particularly sought the Committee's advice.

In sessions on each of the topics the Committee addressed, discussion followed a brief presentation on the Institute's activities in that area. More than forty Institute Fellows, seminar leaders, and others involved with the program took part in these sessions and were available to answer questions. The Committee's discussion of each topic produced a wealth of valuable observations and suggestions, as indicated in the following sections of this report.

We asked that the Committee begin their meeting by discussing the work of the Institute in the context of the education reform movement. We sought their advice on the relationship to current reform proposals of a program like ours through which university faculty members and school teachers work together to strengthen the teaching of academic subjects in schools. We asked them to consider also whether the Institute's position on what the program can accomplish, or should attempt to accomplish, is too limited. These questions strike us as especially timely, particularly in light of our long-professed view that "collaborative programs will succeed only if they have well-defined and manageable goals; they should avoid making impossible claims." From the outset we have sought to focus the Institute sharply in an area where with adequate resources we might over time realistically expect to achieve positive results. We have wanted not to undertake too much, so that we not dilute what the program can accomplish. With the attention now being paid to a lengthy agenda for the reform of public education generally and of the teaching profession in particular, it seemed important to ask the Committee to address the Institute's approach in this larger context.

The Committee's discussion in the first session of their meeting thus ranged from the state of the education reform movement generally to the Institute's particular focus and present scope in light of the far-reaching reform agenda, as well as the advisability of several possible types of expansion of the program. Several members of the Committee voiced skepticism about whether the reform movement has yet produced positive results for students. One spoke, for example, of the movement as a kind of "legislative initiative" with "nothing happening...no real improvement." Another spoke of how imperative it will be to change the conditions for teaching and learning in the classroom. Several members spoke forcefully on the point that the commitment, interest, and investment of the nation's universities--and "high visibility" universities in particular--will also be necessary for the eventual success of the reform movement.

Committee members observed, as they had in their 1986 meeting, that the general movement for collaboration in education continues to grow, even though this has not been a significant aspect of state-level education reform. Members also underscored once again this year the timeliness of the Institute's particular approach. Some spoke of the professional development of individuals currently in the teaching profession as the most pressing need from the standpoint of many school systems. Others said that during the next phase of the reform movement, with an absence of positive results to date and impending teacher shortages, there will be even greater emphasis placed on the development of teachers who are already in the classroom.

While commenting on four possible ways of expanding of the Institute, Committee members noted that three things should be kept in mind: First, the fundamental need initially to give permanence and financial stability to the Institute in its present form; second, a concern for not sacrificing the quality of the program by increasing its scale too much; and, third, the importance of remembering the lessons learned while the program was being developed on a small scale. One Committee member spoke, for example, of how education reforms too often fail because successful programs are "applied across the board without anybody knowing what contributed to the success of the original program."

Among the possible expansions the Committee mentioned, one suggestion was that the Institute might work more intensively in a few New Haven schools where the principals would support a further enlargement of the role of teachers. The suggestion was that, if this proved successful, other schools might then emulate the model. Committee members also commented on extending eligibility for the Institute to New Haven teachers of the elementary school grades. One Committee member suggested that the Institute might consider an expansion not simply "geographically by contiguity" but rather by working with selected communities which are similar demographically to New Haven but which do not happen to be located near a major university. An Institute Fellow attending the meeting reminded the Committee that historically one of the reservations about extending the program to include teachers from other communities, particularly from the suburbs of or wealthier towns near New Haven, has been the retentive effect of the program, that is, the way in which it has encouraged teachers to remain in teaching in New Haven because of the existence of the program and the fact that they would lose the opportunity to participate if they moved to another school district.

Finally, some Committee members stressed, as one member put it, that "the most valuable thing that you can do is hope that by your example other major colleges and universities--and colleges and universities that are less than major--might involve themselves in a similar undertaking." As members have done in past years, Committee members remarked that a principal benefit of the program to the education reform movement is the very fact of its existence at a university like Yale and its permanence "thus far." One said that the "ultimate disservice" to the education reform movement would be for the Institute to cease to exist.

National Dissemination

In April we also sought the advice of the National Advisory Committee on national conferences we are planning for the future. We asked about whom we should invite to the meetings, how much continuity there should be in participants from the 1986 conference, and whether the programs represented at future conferences should continue to send teams of representatives. In making decisions about whom to invite we remain concerned about limiting the size of the meetings so that they can be conducted, like the 1986 conference, in a collaborative way and through discussion instead of by formal presentations. We also sought the Committee's advice on the agenda for future conferences, and, in particular, their view of the most nationally significant issues for our next conference to treat.

The Committee thus discussed the 1986 conference, which a number of the members attended, and provided advice about future conferences. With respect to the 1986 conference, one member gave an example of the value of programs sending teams who travel together to the conference. He said that this had resulted, in the case of one collaborative program, in the superintendent of schools making a financial commitment, which the program had previously sought but had not obtained before the meeting. Another member remarked on the value of the past conference not only for the information it offered about the Teachers Institute, but also for the opportunity it provided those attending to study numerous aspects of collaborative programs like our own. Members commented also on the significance of the conference being held at Yale and related this to their view on the importance of institutions like Yale playing a prominent role in the education reform movement.

With respect to plans for future conferences, Committee members expressed a variety of views about the purposes such meetings might serve, who should be involved, and what topics might be addressed. In general, there were two main views on the Committee about the purpose of future meetings: Some members emphasized the value of conferences mostly in terms of the opportunity they provide to promote the Institute's model for other institutions to emulate, while other members more stressed the value of such meetings in terms of an exchange of ideas among already existing programs. Several members suggested that more time at the next conference be devoted to issues of academic subject matter. One member urged that, in considering conferences and other dissemination activities, we should not lose sight of the critical national issue of the education of minority students. An Institute seminar leader suggested, in that so many Institute curriculum units are written for use with a minority student population, perhaps a future conference could emphasize at the same time both subject matter and the education of minority students, particularly students in urban areas.

Regrettably, however, proposals that the Institute had submitted for the remaining funds needed to organize and conduct yearly national

conferences--beyond the funds provided in the current NEH grant--were declined by several foundations. The Institute was therefore unable to hold a national meeting again in 1987, but hopes to do so in the coming year so long as the necessary funding can be secured. It is particularly important here to note, therefore, that at year's end the Altantic Richfield Foundation renewed its support for the Institute's dissemination. This $10,000 grant was especially heartening because ARCO made it in spite of the severe reductions in their budget they have experienced in recent years.

Also with respect to dissemination, the Institute has continued to work with individuals from institutions located in other communities who either had requested the Institute's assistance previously, or who were inquiring for the first time. Indicative of the diverse institutions represented by the individuals to whom the Institute provided information were: The Connecticut Humanities Council, California State University at Northridge, the Woodbridge, New Jersey Public Schools, the New York Botanical Gardens, Brooklyn College, Birmingham Southern College, the Rhode Island Educational Leadership Academy, the Metropolitan Museum of Art, and the National Aeronautics and Space Administration.

In addition, in April the Institute director presented the program at a conference at the State University of New York at Purchase on "Our Mutual Estate: School/College/Business Partnerships." The conference was attended by teams of some 250 educators from across New York State who are interested in organizing or extending a school-college collaboration. SUNY published proceedings of the meeting, including the director's remarks. (See appendix.)

The Institute also hosted several visits by individuals who came to New Haven to learn more about our program. In March a delegation of H.M. Chief School Inspectors of the United Kingdom met with the Institute director at the conclusion of their ten-day visit to the United States, which was made under the auspices of the U. S. Information Agency. The purpose of their visit was to learn about recent developments in secondary education and the status of the education reform movement in the United States. In April the Institute hosted a visit by the director of the Philadelphia Alliance for Teaching Humanities in the Schools. On June 23-24 Professor and Mrs. J. Myron Atkin came to New Haven for a two-day site visit during which they observed Institute seminars and interviewed more than forty University and Schools teachers and administrators who are involved with the program. (See appendix.) Mr. Atkin, the former Dean of the School of Education at Stanford University, is undertaking an eighteen-month study, supported by the Carnegie Corporation of New York, of collaborative programs.

Program Evaluation

When the National Advisory Committee met in 1986 we were beginning work on the review of curriculum units teachers have written in the

program, on the ethnographic field study, and on new questionnaires for the annual evaluation by Institute Fellows and for the survey of all New Haven secondary school teachers of the subjects the Institute addresses. During the past year, we were immersed in each of these studies, of which the development and administration of the new questionnaires were certainly the most time-consuming for Institute Coordinators and Fellows.

The Committee's discussion of program evaluation in 1987 was especially timely because we were considering what should be the main topics for reports on the review of curriculum units, and where we should place emphasis in analyzing data from the new questionnaires, given the extensive multi-variate analysis that we conceivably could undertake.

Surveys of Fellows and Other New Haven Teachers

Specifically, with respect to the Fellows questionnaire and teacher survey, we sought the Committee's assistance in setting priorities for analyzing the data we accumulated. Beginning during the second week of January 1987, we administered the survey of New Haven teachers, both those who have been Fellows and those who have not, which is described at some length in our 1986 Annual Report. Sixty percent of teachers who had been Fellows and forty-six percent of non-Fellows completed the survey. Following are some of the larger issues that, in light of the Committee's discussion, are guiding our work in data analysis. We recognize that the data available to us, of course, may not provide conclusive answers to all of these questions. Nor is this list exhaustive.

--In what significant ways have Fellows' and non-Fellows' views changed since we completed the earlier survey in 1982?

--Based on questions drawn from national surveys by the Gallup Organization and others, what comparisons can we make between New Haven teachers and teachers nationally?

--What are the views of New Haven teachers on current issues in education reform?

--What are the differences between Fellows and non-Fellows in terms of their educational background, professional activities, demographic characteristics, attitudes toward Yale University, and views on education reform?

--What can we learn from the study about teachers' views on the results of their Institute participation in terms of their preparation, effectiveness as teachers, working relationships, professional activities, morale, and attitude toward remaining in the teaching profession?

--To what extent is the number of years of a teacher's participation in the Institute a significant variable in

Fellows' responses to the questionnaire? For example, do teachers who have participated in the Institute more times hold different or stronger views about education reform and the teaching profession and about the results of their Institute participation?

--To what extent are New Haven teachers currently teaching the subjects in which they majored and which they feel best prepared to teach?

--What do Fellows and non-Fellows see as the principal results of having used Institute units developed either by themselves or by other teachers? In using Institute units, are teachers' professed goals and practices different from the ones that they use to characterize their teaching generally? For example, do Institute units promote differences in teaching style, or different academic competencies and study skills for students to learn?

--What do teachers indicate will most affect their participation in the Institute in future years, and what have been the main incentives for Fellows to participate in previous years?

Review of Curriculum Units

During 1987 we made considerable progress also in the review of the curriculum units. By year's end the Institute completed a full, first draft of a technical report on the review of curriculum units, whose purposes and methods are described in detail in our 1985 and 1986 Annual Reports. With respect to the review, the following are some of the main questions we have been pursuing in this study. Here, too, we sought the Committee's advice in establishing priorities.

--We have wanted to know what subjects have received relatively greater emphasis in the units, given the fact that Institute seminars are organized on subjects requested by teachers who are then free to choose the topics for their individual curriculum units. The Fellows' choice of topics seems especially interesting because of the school setting and the student population for which the units are designed, and because of the widely held view that conventional materials, especially textbooks, are often ineffectual with such students. Based on what teachers have stated in their units, what can we say about the subjects they believe should be taught and can be taught effectively to students in an urban school district like ours?

--At their 1985 meeting the Committee advised that any future dissemination of the units should be to illustrate the

process, not to promote the curricular product, of the program. In what form should we therefore cast the results of the review of units? Should we now consider a formal report which contains both the results of the unit review--including the subjects and structures of the curriculum units--and a collection of units to provide examples of the issues treated by the review?

--Our interest in the structure of the units arises primarily from a precept of the Institute that teachers develop strategies to apply their new learning in their own teaching. That is, in the seminars and in the units we want teachers to examine both what they want students to learn and how this can be best conveyed in the classroom. In that our research suggests that many of the units contain a balanced treatment of subject matter and classroom procedures, should we now consider classifying and describing a small set of exemplary types of curriculum units?

--We have also wanted to re-examine the Institute Guidelines for units in light of teachers' practices in writing units. The Guidelines have been developed over time by teachers' deciding what would be the most efficacious approach to writing curricular materials. Further review of the Guidelines is in the same vein. Based on the findings of the study, should we now attempt to develop a new terminology for the Guidelines? We have at times been dissatisfied with our reliance on such conventional terms as "objectives" and "curriculum" unit, when in many other respects we have developed a vocabulary reflecting the Institute's particular and distinctive approach.

--One of the main reasons we ask teachers to write units is so that we can make some of the results of their participation available to other teachers in the school system. Other teachers may not have had the opportunity to study and to develop approaches for teaching the topics that Fellows have prepared with all the assistance they receive in the Institute from their Yale and school colleagues. Since the early years of the program, believing that this would make the units more accessible and appealing, we have urged Fellows to write in first person and to speak directly of their own experiences with students as a way of persuading other teachers to consider using the material they have developed. Does the present study show, in fact, that there is a kind of literary style that characterizes many of the units and which we might more fully describe as part of an effort to encourage the style's more widespread use?

--The research in this study has yielded information on a number of other topics on which we might prepare one or more

reports: the sources teachers relied on in researching their units, the teaching purposes of the units, the teaching styles the units promote, the activities units envision students undertaking, and the competencies and study skills the units propose that students learn. Are there, in fact, purposes, styles, activities, competencies, or skills that are "generic" in the units?

--Finally, we have considered submitting the units to a more judgmental review by panels of teachers and university faculty members who would assess the academic soundness and pedagogical usefulness of the units. What is the relative importance of, and what purpose would be served by, this additional approach to reviewing the units? Whether we should undertake this form of evaluation of the units proved to be a difficult and controversial question during 1986. Given the collegiality and non-judgmental nature of Institute participation, we had to work through issues about whether this form of evaluation of the units would be inimical to and destructive of that collegiality. In the end, the Coordinators decided that such an evaluation of the units would not run counter to the philosophy of the program because this type of evaluation would protect the anonymity of the individual authors of the units. Now we must decide whether the time and effort that such an evaluation of units would entail would outweigh the usefulness of examining the units in this additional way.

Teachers Who Have Been Fellows

In the fall of 1987 the Institute updated its ongoing study of New Haven teachers who have been Fellows in terms of the proportion of eligible teachers from each New Haven school department who have participated, the number of times Fellows have completed the program, and whether Fellows have remained in teaching in New Haven. This study showed that of the 246 individual New Haven teachers who have completed the program successfully at least once between 1978 and 1987, almost two-thirds (62 percent) are currently in teaching in a New Haven middle or high school. Nine Fellows (4 percent) are teaching in New Haven elementary schools and another sixteen (6 percent) have assumed full-time administrative posts in the school system. Thus almost three-fourths of all Fellows are currently working in the New Haven Public Schools. These statisitics are particularly encouraging because of the Institute's desire to involve individuals who will continue to serve students in our urban school district.

The recent study also established that there are 228 middle school teachers and 226 high school teachers of the subjects in the humanities and the sciences which the Institute addresses. Of this total number of teachers eligible for the Institute, one-third (34 percent) have

completed the Institute at least once. These Fellows are divided evenly between New Haven middle and high schools: seventy-nine (35 percent) and seventy-five (33 percent) of middle and high school teachers, respectively.

In terms of frequency of participation, of current New Haven middle and high school teachers who have participated in the Institute, almost two-thirds (63 percent) have participated only once or twice. Only sixteen individuals (10 percent) have participated in the Institute six or more times. On the other hand, of Institute Fellows who have left the New Haven school system, 80 percent completed the program only once or twice, and only three individuals (4 percent) completed the program four or more times. Thus, as an indication of its cumulative influence in the New Haven school system, and as potential evidence of its effects in retaining teachers in New Haven, the Institute has worked in a much more sustained way with those individuals who have chosen to remain in teaching New Haven schools.

Plans for 1988 and Beyond

Since 1984 the Institute's work in program evaluation has been supported by the Rockefeller Foundation. With the conclusion of the Rockefeller grant in 1987, the Institute completed research in each of the studies we undertook. We also compiled lengthy, preliminary drafts of research findings for internal consideration in both the unit review and the field study, and accomplished much of the data entry from the teacher surveys. As a next step, we will seek the funding necessary to prepare more public technical reports on all three of the principal studies so that they can be furnished to those of the Institute's constituents who may wish to receive them. These reports will be circulated, for example, to funding agencies and will be particularly useful, we believe, to individuals working on the development of similar programs in other communities. We hope then to prepare summaries of the reports individually, as well as a more comprehensive statement of the results of all the studies considered together, so that these more general reports on the study findings can be made available to a wider audience.

We think that our approach to evaluation, which employs the perspectives of several methodologies, will reveal and document much more about the effects of the program on teaching and learning in New Haven. Hopefully, this also can suggest future directions for innovative research at a time when many leaders in education are calling for the development of new approaches in education evaluation generally and for the identification specifically of the most promising means for assessing the results of collaborative programs.

Addressing the topic of program evaluation in April, National Advisory Committee members, in fact, expressed the hope that the

Institute's evaluation procedures will prove to be not only innovative but also replicable elsewhere. The Committee again showed special interest in non-quantitative types of measurement of the results of the program. Finally, they stressed the importance of our ultimately being able to document the results of the program not only for teachers but also for students. In this respect, they suggested possible additional approaches that might be taken in future studies. These include longitudual studies in an ethnographic vein, as well as the compilation of aggregate information based on computerized pupil files maintained by the school district, which might reveal something more of the effects of the Institute on student performance, attendance, and retention in school.

Fundraising Campaign

During 1987 the Institute made further progress in securing operating support and in researching individuals who are major gifts prospects in our endowment fundraising. We are continuing to pursue a fundraising plan which includes increased cost-sharing by the University and the Schools, a stable level of annual support from local grantors, and multi-year operating grants so that we can lessen the program's reliance on operating support from short-term grants and reduce our need for endowment, while building permanent funds to make the program more financially secure.

In addition to the multi-year grants from the NEH and the Carnegie Corporation which have greatly assisted us in continuing the Institute program in the humanities and the sciences, we received a $25,000 grant from the New Haven Foundation, as mentioned above, which assisted with conducting the 1987 program in the humanities and in securing matching funds from the National Endowment for the Humanities. Also mentioned previously, we received significant renewed support for program dissemination from Atlantic Richfield Foundation. Moreover, with a third grant from the College Board the Institute intensified its efforts to prepare individual profiles of prospective endowment donors in terms of their ability to make a major gift, their possible interest in the Institute, and the means we might use to approach those individuals who have both the capacity and propensity to assist with building the Endowment Fund.

Research on Individual Prospects

Specifically, because we have anticipated that our capacity to build an adequate endowment for the Teachers Institute will depend heavily on individual giving, for several years we have been collecting from a variety of sources the names of individuals who may be prospects for major gifts. With support from the College Board the Institute has been pursuing, during the past three years, the preparation of detailed information on these individual prospects. This has involved the determination initially of what types of information would indicate whether an individual may be a genuine prospect, the formulation of

research procedures which might provide this information, and the evaluation of the information the research actually yields.

As we reported previously, by the fall of 1986 we had compiled an overall list of some 500 individuals for whom we believed it would be worthwhile to develop additional information. We designed a preliminary research procedure and selected a representative group of about 100 names to begin to compile information on these individuals and, at the same time, to refine our research methods based on practical experience in conducting research. We also divided the total list of names into three general categories: prospects who are affiliated with Yale, prospects who have no Yale affiliation, and individuals who may be willing to serve as campaign advisors, whether or not they themselves may be prospects for major gifts.

Our research was designed to yield individual profiles of prospective donors in terms of their ability to make a major gift, as indicated, for example, by their stock holdings, salary, family wealth, and history of charitable giving; their possible interest in giving to the Institute as demonstrated by their previous philanthropic interests and by an interest in Yale and/or in New Haven, and in such areas as public education, urban affairs, youth, and minority students; and, finally, the means we might use to approach the individuals who have both an apparent capacity and inclination to support the Institute's endowment. Having identified the types of information we needed to prepare individual profiles of prospective donors, we began research by consulting first the most readily accessible sources for this information. Because of the number of individuals being researched and the amount of detailed information our research was yielding, we constructed a computerized database to organize and analyze the information we were developing.

With the support provided by the College Board during the past year we made definite progress in this major gifts campaign research. While conducting research on the first 100 prospects we refined both our research and data management procedures. We completed a five-page research form to guide the collecting and recording of uniform types of information on all the prospects being researched. We also determined those items in our research findings which should be incorporated in the computerized database. In particular, we wanted to anticipate the categories of information by which we might wish to analyze and sort prospects. We thus keyed forty items on our research form to correspond to fields in the computerized database to simplify and to standardize data entry.

At the same time, while we were refining our research and information management procedures, we were expanding the list of prospects being actively researched. In 1987 we completed basic research and data entry on more than 200 individual prospects, and we began to examine by data analysis the general characteristics of this group of prospects. We also more than doubled the overall list of prospects to be researched, so that it included more than 1,200 names by year's end.

Our ongoing research confirms that, as we had believed and as our National Advisory Committee has stressed in each of their annual meetings, there are numerous individuals who indeed are prospects for significant gifts to the Institute's endowment. This underscores the value of continuing to expand, to research, and to analyze the full list of names, relying on sources we have used previously and even more heavily on advisors to our campaign. Our data management capabilities now make the assistance of advisors more efficient and worthwhile. It is possible, for example, to highlight the areas in which we have and have not developed sufficient salient information. By continuing research and consultation with advisors we therefore soon will have the information we need for beginning to assign priorities to initiate the cultivation of individuals for major gifts.

Planning for the Long-Term Continuation of the Teachers Institute

To assist with the transition under the new University administration, the Institute created a Steering Committee within the University Advisory Council on the Institute, which is chaired by Howard R. Lamar, Sterling Professor of American History and former Dean of Yale College. Other committee members, all of whom have led Institute seminars, are: Robert B. Gordon, William Kessen, Jules D. Prown, and Thomas R. Whitaker. This committee met several times together, and with President Benno C. Schmidt, Jr., and Provost William D. Nordhaus, to begin to pursue with the new administration issues about the long-term continuation of the program. President Schmidt also met in April with the National Advisory Committee to discuss the main points that were made during the course of their meeting and to address, in particular, the Institute's fundraising campaign. At that time he restated his commitment to trying to provide the Institute a more permanent, firmer financial foundation. (See Yale Daily News article of April 25, 1987, in appendix.)

Both at the Committee meeting and in more public forums President Schmidt has said that Yale's relationship with New Haven was one of the five general areas of activity and responsibility for Yale which he chose as the focus of his planning efforts during his first year as President. After systematically examining numerous aspects of that relationship -- including especially economic development and Yale's educational contributions -- he concluded, he has stated, that the Teachers Institute is a "striking success" and "a proven institutional mechanism." He has stressed the importance of the Institute for the New Haven community and for Yale, and as a model for the country. At the Committee meeting Mr. Schmidt said that colleges and universities have to become more involved with issues of educational quality in public and private secondary schools, and he described how New Haven is "a wonderful place to look to educational innovation" because it has many of the problems of urban education, but in a manageable environment. He spoke of the Institute as being therefore in Yale's self-interest, broadly perceived.

Committee members responded that they were delighted to hear the President's remarks made in such strong terms, that they applauded what he said, and that his statement exceeded their fondest expectations. One member said that strengthening teaching is the foremost problem in public education, that the Institute as a faculty collaborative addresses this problem "in a very extraordinary way," and that it "deserves permanency." He said that Yale should "forever be committed to a relationship of its faculty with elementary and secondary faculty in a joint pursuit of strengthening education." He added that, while hopefully as elementary and secondary education is improved the Institute might change its character, it will still be necessary.

Another member said that the problem of teaching in public education "is not going to go away but is going to get worse, and local solutions such as the Institute are crucial as models." He added that an endowment "will solidify the status and significance of this Institute from the perspective of Yale faculty," and that there will be both a sense of permanence and the opportunity to expand the program. A faculty member attending the meeting said that he thought that an endowment for the Institute will produce "a remarkable psychological change" and will "tighten the collegial bond" between Yale faculty members and school teachers.

Several Committee members advised, as they had done in previous meetings, that Yale has a strong opportunity to raise endowment gifts for the Institute and that the Institute's endowment goal is a viable and reasonable amount of money with enormous potential and great symbolic importance for education reform nationally.

Highly significant, therefore, to the long-term continuation of the Institute, the Ford Foundation established, effective January 1, 1988, an interest-bearing Cash Reserve Fund for the Institute, which will function in a manner similar to our Endowment Fund. We believe that this will become a valuable new option for other foundations, corporations, and individuals who also wish to provide long-term support to the Institute, and who may prefer to provide that support in a form other than endowment.

Events of the past twelve months have therefore reconfirmed our view about the importance, timelines, and practicality of building adequate permanent funds for the Teachers Institute so that the program may continue on a long-term basis to serve New Haven schools, as well as schools and colleges across the country.

Appendix

Institute brochure for 1987

Descriptions of 1987 seminars in the sciences and the humanities

National Advisory Committee Meeting Agenda for April 20, 1987

Schedule for Site Visit by Professor and Mrs. J. Myron Atkin, June 23-24, 1987.

Letter from J. Myron Atkin, June 30, 1987.

Recent Report Citing the Teachers Institute:

Wilbur, Franklin P., et. al. National Directory of School-College Partnerships: Current Models and Practices. Washington, D.C.: American Association for Higher Education, 1987, pp. 13-14.

Conference Proceedings:

Vivian, James R. "Partnerships and the Community." In Our Mutual Estate: School/College/Business Partnerships. Purchase: State University of New York, 1987, pp. 43-45.

Recent Articles on the Teachers Institute:

"Review of Teaching in America," by Rebecca Yount, Community Education Journal, January 1987.

"Yale in New Haven; Teachers Institute Enhances City Schools," Yale Daily News, April 25, 1987.

"Building Bridges between Schools and Colleges," by Ellen Marsh, Humanities Magazine, July/August 1987.