



**PROFESSIONAL DEVELOPMENT WITH THE
YALE-NEW HAVEN TEACHERS INSTITUTE MODEL:**

Impact, Lessons, and Future Prospects

M. Bruce Haslam
Üllik Rouk

With assistance from:
Katrina G. Laguarda

February 2006

Prepared by Policy Studies Associates, Inc.

Commissioned by The Wallace Foundation



The Wallace Foundation seeks to support and share effective ideas and practices that expand learning and enrichment opportunities for all people. Its three current objectives are:

- Strengthen education leadership to improve student achievement;
- Enhance out-of-school learning opportunities;
- Expand participation in arts and culture.

For more information and research on these and other related topics, please visit the Knowledge Center at www.wallacefoundation.org.

<https://doi.org/10.59656/EL-PP1944.001>

Table of Contents

Executive Summary	i
Introduction.....	1
The National Demonstration Project	2
Organization of This Report	4
The Yale-New Haven Teachers Institute Principles.....	5
Collegiality and Engagement.....	5
Key Leadership Roles.....	6
Establishing Institutional Partnerships.....	7
Adequacy of Resources.....	8
Collegiality and Engagement in Teachers Institute Seminars	8
Teacher Participation	9
Organization of the Institute Seminars	12
Experiments with the Structure of the Seminars.....	18
The Preparation and Use of Curriculum Units	20
Perspectives on the Quality of Curriculum Units	23
Leadership in the Teachers Institutes.....	27
Responsibilities of Institute Directors.....	27
Opportunities for Teacher Leadership	28
Partnerships.....	30
Evolution of Local Institutional Partnerships	30
Challenges of Maintaining Partnerships	33
The Role of Yale-New Haven Teachers Institute: Leadership and Building a Network.....	37
Resources	41
Annual Expenditures.....	41
Meeting the Local Match Requirements.....	42
Impact, Lessons Learned, and Prospects for the Future	45
Early Impact of the Teachers Institutes	46
Lessons from the National Demonstration Project.....	47
Prospects for Sustainability.....	51

Executive Summary

The Yale-New Haven Teachers Institute, a partnership of Yale University and New Haven, Connecticut, Public Schools established in 1978, rests on the assumption that “university and school teachers across the country have a strong, mutual interest in the improvement of teaching and learning in the schools.”

At the heart of the institute is a professional partnership between university faculty and K-12 teachers (referred to, respectively, as Seminar Leaders and Fellows). In this partnership, Fellows identify topics for study that are of professional interest to them and Seminar Leaders, who are experts in their disciplines, organize a series of seminars around these topics. The main product of the seminars is a curriculum unit that each Fellow develops for use in his or her classroom and for sharing with others. Supporters argue that increased opportunities for professional learning and the satisfaction of completing a difficult intellectual task are also important outcomes of the institutes.

Supported by a grant from the Wallace Foundation, in 1999 the Yale-New Haven Teachers Institute embarked on a three-year effort to demonstrate the feasibility of implementing the institute model and adapting it to meet local needs in urban districts that are much larger than New Haven. These sites were:

- The Albuquerque Teachers Institute (ATI)
- The Houston Teachers Institute (HTI)
- The Pittsburgh Teachers Institute (PTI)
- The Santa Ana Teachers Institute (SATI)

By the end of the demonstration project, three of the four sites continued to operate as teachers institutes. Currently, two of the four original sites continue to operate. No new institutes have been established.

The Yale-New Haven Teachers Institute articulated 16 principles to inform planning, development, and implementation of teachers institutes in the demonstration sites. These principles define the institute model and set forth expectations and specifications for the structure, key roles, and working relationships among various partners. They emphasize four themes: collegiality and engagement, teacher leadership, institutional partnerships, and resources. These themes are also the framework for this report.

Collegiality and Engagement in Teachers Institute Seminars

- During the first four years of operation, an estimated 900 teachers enrolled in 75 seminars across the four demonstration sites. Most were veteran secondary school teachers. Four incentives were especially important in their participation. These included opportunities to (1) develop materials that would motivate their students; (2) develop curriculum that fit their needs; (3) increase their subject mastery; and (4) exercise intellectual independence.
- Teacher survey data from three institutes indicate that significant numbers of these teachers had adequate opportunities to suggest seminar topics. Teachers in Houston were more likely than others to report having such opportunities, probably reflecting that site's reliance on teachers communicating with teachers and the Director's marketing efforts. In addition, teachers influenced seminar content by discussing their needs and interests as the seminars proceeded.
- Seminar Leaders indicated that they generally found their participation a rewarding learning experience and that they learned a lot about local school systems and teachers. Their greatest challenges, they reported, were adjusting their expectations and seminar content to Fellows' needs and interests.

The Preparation and Use of Curriculum Units

- About eighty percent of Fellows who enrolled in seminars completed curriculum units
- Many Fellows found preparing the units to be a daunting task, made especially difficult by their not understanding the concept of a curriculum unit and the time it takes to prepare one, guidance that did not pay enough attention to rationale and content, and the lack of models after which to pattern their work. While Seminar Leaders could comment on the substance of the units, they were unfamiliar with appropriate instructional strategies and state and local curricula and standards. In addition, many Fellows were inexperienced writers. Institutes addressed these problems by providing considerably more detail about the commitments required for participation, developing comprehensive written guidance for preparing curriculum units, highlighting the importance of writing sustained, narrative prose, and placing more emphasis on linking units to local curriculum and extending discussions of pedagogy. Institutes also initiated a variety of workshop activities to help Fellows prepare the units and to give

them advice on identifying and locating materials to use in preparing the units.

- The quality of completed curriculum units varied. Some were of high quality while others lacked strong intellectual frameworks or did not convey seminar topics well. Seminar Leaders took this problem seriously and many adjusted their own teaching and feedback to help Fellows improve their units.
- All but a very few Fellows reported that they used the curriculum units in their classrooms. Most were enthusiastic about this experience but some reported that it did not go so well. Only a small number of Fellows reported they did not use the curriculum units, largely for reasons that were out of their control, such as being reassigned or lacking appropriate materials and equipment. Fellows reported that the units often resulted in a spike in student interest and enthusiasm, but there was very little evidence of impact on student learning
- All four institutes aggressively disseminated the units throughout the districts, but by the end of the demonstration project there was limited evidence that other teachers were using them or that principal and district leaders, although aware of the units, had given much thought to ways to use them.

Leadership in the Teachers Institutes

- Being an institute Director is hard work and one of the hallmarks of good leadership became Directors' strong commitment to the Yale-New Haven Teachers Institute model and their ability and willingness to communicate and fully implement its vision.
- Institutes provided a number of opportunities for teachers to assume leadership of their professional development. Teachers selected seminar topics, negotiated selection of seminar content, and took part in organizational tasks such as recruiting Fellows, reviewing applications, coordinating seminar activities, and communicating about the institute to others.

Partnerships

- Directors had varying levels of success establishing strong institutional partnerships, depending on the Director's prior experience in a school district or an institution of higher education. Central office staff and principals who knew about the institutes expressed generally positive attitudes about them. Most principals

and district staff interviewed, however, were unfamiliar with the work of the institutes and expectations for their roles.

- Coping with changes in leadership and key players was challenging, but Directors generally managed to develop new working relationships as the leadership or structure of the partner organizations changed.
- Institutions of higher education provided supportive operating environments for institutes, providing not only an academic culture, but also by recruiting expert faculty to design and lead seminars, as well as arranging logistics such as classroom space, access to libraries, and parking. In contrast, school districts were less explicitly supportive. Directors facilitated teacher participation in the institutes by negotiating various kinds of professional development credits for Fellows, including credit toward graduate degrees, certification, and salary supplements.
- The role of the Yale-New Haven Teachers Institute was instrumental in leading, facilitating, being a critical friend, and monitoring the institutes. Partners welcomed the opportunity to attend its annual meetings, which became important forums for communicating the vision of the teachers institutes, discussing expectations, challenges, and progress in implementing the model, and exchanging information among institute participants and institutional partners. Site visits, feedback on written reports, and other kinds of communications and interactions from the Yale-New Haven Teachers Institute provided encouragement, technical assistance, and important reminders to institutional partners about making good on their commitments to support the institutes.
- Yale-New Haven Teachers Institute's approach to encouraging demonstration sites to implement the model much as it was implemented at the original site and, then, based on lessons learned, consider ways of adapting it to more effectively meet local needs and circumstances probably increased early fidelity and also created some tensions with local sites as they struggled to address local needs and priorities.

Resources

- Institutes reported annual operating expenditures ranging from \$176,275 to \$256,681, with the average \$213,892, with the largest portions of expenditures covering salaries and stipends.

- Meeting local match requirements was a major challenge to all of the institutes except one, where the university met all but a small portion of the match. School district partners made limited financial contributions; for this reason fundraising became a major task in each institute.

Impact, Lessons Learned for Prospective Partners, and Prospects for the Future

- Many teachers developed curriculum units that were enthusiastically received by their students when they used them in the classroom. There was, however, limited evidence of impact on student learning outcomes.
- Communications are vital so that stakeholders understand the model and what is expected of them.
- Effective leadership of a teachers institute involves understanding and commitment to the model, the ability to work effectively with universities and school districts, and fund raising skills.
- Starting small keeps institutes at a manageable scale and helps maintain quality control. However, the institute's limited reach and visibility in large, urban school districts may have undermined longer term support and commitment to the institutes as viable components of local professional development systems.
- Documenting outcomes for teachers and students is important so school districts and external funders understand the potential for returns on their investments.
- Clearly addressing the benefits of the model in meeting local needs and priorities demonstrates support for district goals and may, in turn, produce added support for institutes.

In the end, the experience of the national demonstration project shows that teachers institutes can and do build on teacher learning needs as teachers themselves define them. In addition, they model both intellectual rigor and collegiality in teachers' professional learning. Their challenge is to demonstrate that they add value to their institutional partners—schools districts and institutions of higher education—by explicitly address the partners' needs and priorities. On the district side, the challenge is exacerbated by the fact that institutes remain small entities serving relatively small numbers of teachers each year.

Introduction

In his seminal book on change in schools, *The Culture of Schools and the Problem of Change*, Seymour Sarason (1996) observed that “teachers can not create and sustain contexts for productive (student) learning unless those conditions exist for them.” Despite the growing consensus about the importance of high-quality professional development as a key ingredient in school reform, many teachers do not work in schools and districts in which the conditions that encourage or sustain effective professional learning exist.

In contrast to this paucity of viable opportunities for professional learning, the Yale-New Haven Teachers Institute, a partnership of Yale University and New Haven, Connecticut, Public Schools established in 1978, rests on the assumption that “university and school teachers across the country have a strong, mutual interest in the improvement of teaching and learning in the schools.¹” This mutual interest forms the common ground upon which the teachers institute model rests.²

One way of describing a teachers institute is to focus on two kinds of partnerships, one of which supports but does not interfere with the other. At its heart is a professional partnership between university faculty and K-12 teachers (referred to, respectively, as Seminar Leaders and Fellows when they participate in the institutes). In this partnership, Fellows identify topics for study that are of professional interest to them and Seminar Leaders organize a series of seminars around these topics. During the course of the seminars, Seminar Leaders and Fellows explore key issues, and, with guidance and feedback from Seminar Leaders and other Fellows, Fellows prepare curriculum units for use in their classrooms and for sharing with colleagues.

These partnerships between Seminar Leaders and Fellows are embedded in and supported by institutional partnerships between institutions of higher education and school districts. These institutional partnerships support and provide much of the context for the working relationships between Seminar Leaders and Fellows. The partner institutions are expected to provide or actively seek resources for the teachers institute and to facilitate faculty and teacher participation in all of the institute’s activities. Leaders from partner organizations

¹ Under the terms of the contract, the evaluation of the national demonstration program did not focus on the the operations of the Yale-New Haven Teachers Institute except in its role as leader and facilitator of the demonstration project, which included technical assistance, overseeing and guiding implementation of the local projects and convening and facilitating the network of teachers institutes. Interested readers may consult the Yale-New Haven Teachers Institute website at <http://www.yale.edu/ynhti/> to learn more about the history of the institute and its current activities.

² *On Common Ground* is the title of the journal published by the Yale-New Haven Teachers Institute.

are involved in early planning and design of the institutes and may play a role in governance, although primary responsibility for governance rests with the university faculty and teachers participating in the institutes. Institutes are housed on college or university campuses. Institute Directors hold faculty or staff positions in the university and typically report to a university administrator.

School district-university partnerships and working relationships between university faculty and teacher are not unique to the teachers institutes. Indeed, there was a history of both kinds of relationship in the four demonstration sites before the national demonstration project began. Nevertheless, as this report explains in more detail, creating and maintaining the partnerships expected by the Yale-New Haven Teachers Institute posed special challenges. Overcoming these challenges was no easy task.

The National Demonstration Project

The primary purpose of the National Demonstration Project, which at its inception represented the culmination of almost a quarter of a century of experience in providing intellectually rigorous professional learning opportunities for teachers in the New Haven schools, was to demonstrate the feasibility of implementing the institute model in urban districts that are much larger than New Haven. In doing so, the demonstration project was also expected to yield lessons for prospective partners, policymakers, and sponsors of additional institutes.

Supported by a planning grant and, subsequently, a four-year grant of \$2.5 million from the Wallace Foundation,³ in spring 1998, the Yale-New Haven Teachers Institute invited 14 potential university/school district partnerships to submit proposals for planning grants and awarded eight-month grants to five sites. Following the award of these grants, the Yale-New Haven Teachers Institute invited the sites to send teams to a 10-day session to learn more about the teachers institute model, to learn about the New Haven experience, and to reflect on the potential benefits of the model for achieving their educational goals. Four sites received three-year implementation grants and offered the first round of seminars in 1999.

In addition to partnerships between Seminar Leaders and Fellows and institutional partnerships between universities and school districts, teachers institutes in the demonstration project benefited from a third partnership—their partnership with the Yale-New Haven Teachers Institute and other teachers institutes. As part of the overall strategy of the demonstration project, as well as a nascent effort to increase the number of institutes across the country, the Yale-New Haven Teachers Institute worked to establish a network among the four demonstration sites. Network meetings and communications were intended to help leaders, participants, and other stakeholders in local demonstration projects

³ The Wallace Foundation was formerly the Wallace-Readers Digest Funds.

understand and implement the Yale-New Haven model, to share ideas and reflect on their progress and challenges in implementing the model, and to plan for the future.

The sites in the National Demonstration Project included:

- **The Albuquerque Teachers Institute (ATI).** The ATI is a partnership of the Albuquerque Public Schools (APS) and the College of Arts and Sciences at the University of New Mexico (UNM). APS is a large, sprawling district that serves more than 85,000 students, many of whom are Hispanic and from low-income families. The ATI initially targeted 21 middle and high schools. The university has a relatively long history of working with APS, largely through the College of Education with more limited involvement with the College of Arts and Sciences. A defining feature of this institute is its focus on Southwest cultures, history, geography, and politics.
- **The Houston Teachers Institute (HTI).** The HTI is a partnership of the Houston Independent School District (HISD) and the University of Houston (UH). With more than 210,000 students, HISD is one of the five largest school systems in the country, and like other Texas school districts, has had to cope with significant changes in student demographics and, for the past decade, the implementation of one of the most comprehensive accountability systems in the country. One of HTI's early challenges was simply to gain visibility on the campus because it was one of literally hundreds of partnerships between UH and other institutions in the Houston area.
- **The Pittsburgh Teachers Institute (PTI).** PTI is a partnership among Pittsburgh Public Schools (PPS), Chatham College, and Carnegie Mellon University. PPS, which is the demonstration site closest in size to New Haven Public Schools, enrolls approximately 40,000 students. Chatham is a small liberal arts college and Carnegie Mellon is a research university recognized for its leadership in science. Both higher education partners have operated teacher preparation programs, but PTI represents the first time they worked together in a partnership with PPS. PTI is housed at Chatham College. PTI's Director is a respected educator who served for many years in PPS. In 1999-2000, she took leave from her position as Director of PTI to serve as PPS interim superintendent.

- **The Santa Ana Teachers Institute (SATI).** The SATI was a partnership of the Santa Ana Unified School District (SAUSD) and the University of California-Irvine (UCI). Located in one of the fastest growing areas of California, enrollment in the SAUSD increased from 54,000 students to more than 60,000 during the demonstration project. Many of these students have very limited English skills. This institute was housed in UCI's Center for Educational Partnerships and is part of the university's effort to reach out to school districts in Orange County and surrounding areas. The university underscored its support for the partnership by funding almost the entire local match requirement during the initial three-year funding period.

At the end of the initial three-year funding period, all four teachers institutes had offered three sets of seminars, one set in each of the first three years of operations. Three of the institutes continued to offer seminars in 2002 and 2003. More importantly, each of the institutes engaged university faculty and an estimated 900 teachers in ongoing discourse, and gave teachers opportunities to prepare a broad array of curriculum units for their own use as well as for other teachers.⁴ By these indicators alone the National Demonstration Project can be judged to have met its goal of establishing teachers institutes in four large urban districts.

Organization of This Report

This report examines the development and maturation of teachers institutes in the four demonstration sites and derives lessons for prospective partners and policymakers. It begins with a review of the principles that define the institute model and that guided implementation in the four sites. Next, it looks at the seminar experience, focusing specifically on collegiality in the preparation and use of curriculum units. The third section concentrates on the preparation and use of curriculum units, and the fourth examines leadership in the institutes, with particular attention to leadership by teachers. The fifth section explores the organization and governance of the institutes, with particular attention to the various institutional partnerships that support them and the challenges of sustaining these partnerships. This section also summarizes the role of the Yale-New Haven Teachers Institute as leader, monitor, and partner in the demonstration project. The fifth section looks at resource issues. The report closes with a discussion of the impact of the teachers institutes, lessons learned from the national demonstration project, and the challenges of sustaining teachers institutes in the future. Appendix 1 presents the 16 principles of the Yale-New

⁴ The total reported enrollment in the institutes during the first four years of operations was 979. The actual number of teachers who enrolled in the seminars is lower because some teachers enrolled in more than one seminar.

Haven Teachers Institute model. Appendix 2 provides an overview of the approach to the evaluation.

The Yale-New Haven Teachers Institute Principles

The Yale-New Haven Teachers Institute articulated 16 principles to inform planning, development, and implementation of teachers institutes in the four demonstration sites. (See Appendix 1.) These principles define the institute model and set forth expectations and specifications for the structure, key roles, and working relationships among various partners. The principles are, in effect, standards for the four demonstration sites, based on almost a quarter century of experience in developing and operating the first teachers institute in New Haven. The principles served as important reference points as the implementation process unfolded.

The guiding principles emphasize four themes: collegiality and engagement, teacher leadership, institutional partnerships, and resources.

Collegiality and Engagement

The emphasis on collegiality and engagement in institute seminars by both university faculty and teachers is perhaps the most important theme in the principles. The principles state:

Participating teachers from the institutions of higher education and the school are considered professional colleagues working within a collegial relationship. Seminar Leaders and Fellows understand that all participants bring to the seminar important strengths, both experiences and knowledge, with respect to the seminar topic and/or its potential relevance to the classroom.

This notion of collegiality implies an important division of intellectual labor in which Seminar Leaders bring "...the 'content' or 'knowledge' of one or more disciplines" and Fellows add their expertise in classroom instruction. The two sets of experiences come together in the seminar. The language of the principles further reinforce collegiality between Seminar Leaders and Fellows by emphasizing that "the Fellows are not students in university courses. Rather, they are considered full members of the university community during the year in which they are taking a seminar." Not only are the relationships expected to be collegial, they are expected to be partnerships of equals.

Engagement in seminar activities is expected to extend over a period of several months and to culminate in the Fellows developing a "substantial" curriculum unit for use in their classrooms and to share with other teachers.

According to the principles:

This curriculum unit will consist of an essay on the material to be presented in the classroom and the pedagogical strategies to be employed, followed by several lesson plans, which are examples of those to be used by the teacher, and an annotated bibliography.

The expectations that Fellows will be engaged in the institute seminar for several months and that they will produce a curriculum unit stand in sharp contrast to expectations for much teacher professional development. The latter typically does not extend over long periods of time, demand much engagement, or lead to the production of instructional materials.

The emphasis on collegiality and engagement is clearly a cornerstone of the institute model and supporters of the institutes frequently asserted that many of the most important benefits were products of the relationships between Fellows and Seminar Leaders. At the same time, as is discussed in more detail below, the curriculum units remained the most visible artifact of the program and their production was the focal point of the Fellow's work in the seminars. As they were defined in the institute principles, the curriculum units did not fit easily into the academic traditions of the college and university partners. Similarly, as highly individualized intellectual essays that somehow linked seminar content to classroom instructional tasks, they were not the standard fare of curriculum design or instructional planning.

Key Leadership Roles

The principles define two leadership roles. First, they call for a full-time Director to “to serve as convener, administrator, and liaison between the district and the administration and faculty of the institutions of higher education, and fund-raiser.” The Director is expected to “report to the chief officers of the institutions [of higher education] and the district, and is able to recruit faculty from various parts of the institution of higher education.”

The second leadership role belongs to teacher leaders, who, as noted above, “play a major and indispensable role in the planning, organization, conduct, and evaluation of the programs intended to benefit them and, through them, their students.” Additional expectations for teacher leaders include communicating about the teachers institutes, recruiting colleagues as Fellows, and serving as Seminar Coordinators. (Although not specified in the principles, the Yale-New Haven Teachers Institute encouraged the new institutes to establish cadres of Teacher Representatives to serve as liaisons to schools and assume responsibility for communications and recruiting Fellows. Similarly, it encouraged sites to assign Fellows to work with Seminar Leaders to coordinate seminar activities.)

Here again, these leadership roles represent a sharp contrast with most other professional development programs and initiatives. Typically, teachers have limited voice in determining the content of these activities or in shaping the learning opportunities. In addition, teachers have almost no role in larger professional development governance issues.

Establishing Institutional Partnerships

The principles call for a partnership that links institutions of higher education with school districts that enroll a significant number of students from low-income communities. They expect partners to commit themselves to collaboration throughout the grant period and beyond and to ensure that teachers institutes have sufficient resources. On the higher education side, the principles call for:

...a pool of faculty from the liberal arts and/or sciences who teach at the undergraduate and/or graduate levels who are prepared to lead seminars, advise in the shaping of the curriculum, and endorse the curriculum offered by the Institute.

Although they do not explicitly proscribe participation by faculty from departments or colleges of education, the principles do stipulate that education faculty who become involved in a teachers institute should “indicate their willingness to lead seminars that focus upon ‘content’ rather than ‘pedagogy’.”

On the school district side, the expectations are for a much more limited, almost passive, institutional role. The principles call for a “pool of teachers...prepared to play a leading role in planning, organizing, sustaining, and evaluating the new Institute.” The principles also anticipate that “policies within the school district(s) pertaining to curriculum and professional development...must be conducive to the development of the Institute, or at least not incompatible with it.”

The institutional partnerships envisioned by the principles support the institutes, but are not expected to exert much influence or provide much direction to them. In this sense, institutes are expected to enjoy a considerable degree of autonomy on the college or university campuses and almost complete autonomy from the districts. This arrangement is re-enforced by the fact that the directors are college or university employees and not employees of the districts.

In addition to institutional partnerships in each of the sites, the principles require “an explicit and visible relation between the new institutes and the Yale-New Haven Teachers Institute” and communications among the new institutes. The new institutes were expected to share information about their experiences

among themselves and with others who may be establishing or considering establishing institutes in their locales.

Adequacy of Resources

The principles address the resource issue in several ways. First, they call on the partners to ensure that there are adequate resources to support the work of the institutes during the period of the demonstration project and to look ahead to garnering resources for sustaining the institutes beyond the initial funding period. The principles are also quite clear that ensuring adequate financial support is to be a shared responsibility. Second, the principles call for remuneration for Fellows and faculty who serve as Seminar Leaders. Although not specified in the principles, there was an expectation that Fellows would be remunerated for completing a curriculum unit and for serving as Teacher Representatives or Seminar Coordinators. The principles do specify that payments to Fellows are not part of their salaries and are, therefore, “not to be viewed as subject to any conditions of employment.”

With these principles in mind, the four demonstration sites embarked on a challenging experiment in teacher professional development and school district-university partnerships.

Collegiality and Engagement in Teachers Institute Seminars

The heart of a teachers institute is a series of intensive seminars lasting over a period of several months. Seminars are led by university faculty who have an interest in and command of the topics Fellows have chosen to pursue. Institute Fellows complement the faculty member’s content expertise with their knowledge of pedagogy and school curriculum.

Prior to each cycle of seminars, the teachers institutes, working through their networks of Teacher Representatives and other communication channels, invite teachers to suggest seminar topics. Institute Directors and committees of Fellows review the suggestions to identify the most popular or frequently mentioned topics, and institute Directors then identify faculty who may be willing to organize a seminar on one of them.

Over the course of the demonstration project, institute seminars covered a wide range of topics, with some variation in how they were organized. While Seminar Leaders and Fellows speak of many important intangible benefits emanating from seminars, such as a renewed interest in professional learning and commitment to teaching, the primary products of teacher participation are the curriculum units developed by the Fellows and disseminated by the institutes.

This section of the report begins with an overview of teacher participation in the institutes. Next, it looks at the organization of seminars. The last part of this section discusses experiments with the structure of seminars in two teachers institutes.

Teacher Participation

During the first four years of operation, an estimated 900 teachers enrolled in 75 seminars across the four demonstration sites. These Fellows completed just under 800 curriculum units. (See Exhibit 1.)

	Number of seminars	Fellows enrolled	Units completed	Percentage of Fellows who completed curriculum units
Albuquerque				
1999	4	39	35	90
2000	6	69	49	71
2001	8	84	73	87
2002	8	87	86	99
Total	26	279	243	87
Houston				
1999	6	73	58	79
2000	6	55	33	60
2001	5	72	38	53
2002	7	83	69	83
Total	24	283	198	70
Pittsburgh				
1999	4	32	26	81
2000	6	48	44	92
2001	7	84	72	86
2002	7	70	54	77
Total	24	234	196	84
Santa Ana				
1999	6	52	45	87
2000	7	73	63	86
2001	10	58	43	74
2002	-	-	-	-
Total	23	183	151	83

Exhibit reads: In 1999, the Albuquerque Teachers Institute offered four seminars.
Source: Teachers Institutes' Annual Reports, 1999-2002.

An important element in the original design of demonstration sites was the selection of about 20 target schools in each partner district. This design feature permitted institutes to communicate and work effectively with a manageable number of schools, rather than to invest in communications and recruitment across very large districts. Specific approaches to targeting schools varied from one demonstration site to the next. As the demonstration project unfolded, individual institutes added more target schools, particularly when teacher enrollments from the original schools were low.

Across the four institutes, the majority of Fellows who participated in seminars during the first three years (the years for which complete data are available) were veteran teachers with six or more years of experience. (See Exhibit 2.) Fellows were also more likely to be secondary school teachers than elementary school teachers. The institutes did not restrict enrollment to teachers with more experience or seniority. However, the fact that new teachers typically spend a lot of time becoming acquainted with their jobs and completing courses they need for certification and licensure may have made participating in a teachers institute difficult for them. The preponderance of secondary school teachers is most likely due to the fact that the institutes recruited middle and high school teachers early on and only later began to encourage elementary school teachers to participate. The content focus of the seminars may also be more appealing to secondary school teachers, especially high school teachers, who often see themselves as content specialists.

Exhibit 2
Fellows' Years of Teaching Experience,
Percent of Fellows

	5 or fewer years	6-10 years	11-20 years	Over 20 years
Albuquerque	34	29	18	18
Houston	24	20	22	34
Pittsburgh	21	18	15	47
Santa Ana	36	19	23	22

Exhibit reads: Approximately one-third (34 percent) of all ATI Fellows have five or fewer years of teaching experience.
Source: Yale-New Haven Teachers Institute Teacher Survey, 1999-2001

Overall, the numbers of teachers who participated in the institutes each year represent a small proportion of the teachers in the targeted schools and an even smaller proportion of the teachers in the districts.

Teachers reported that they participated in the institutes for a variety of reasons, but they mentioned some reasons more often than others. For example,

surveys administered by institutes to all Fellows who completed a curriculum unit showed that 75 percent or more teachers rated four factors as “important incentives” for participating in an institute. (See Exhibit 3.) Across institutes, opportunities to (1) “develop materials that motivate my students,” (2) “develop curriculum that fits my needs,” (3) “increase the mastery of the subjects I teach,” and (4) “exercise intellectual independence” were important incentives.

Exhibit 3
Incentives that Fellows Rate as Important in
Their Decision to Participate in a Teachers Institute

	District				
	Total	Albuquerque	Houston	Pittsburgh	Santa Ana
Opportunity to develop materials to motivate my students	93% (493)	95% (163)	89% (113)	94% (132)	90% (85)
Opportunity to develop curriculum that fits my needs	86% (462)	88% (154)	82% (105)	89% (124)	85% (79)
Opportunity to increase my mastery of the subject(s) I teach	85% (456)	86% (151)	84% (106)	88% (124)	80% (75)
Opportunity to exercise intellectual independence	80% (418)	75% (125)	77% (94)	80% (111)	93% (88)
Opportunity to work with faculty members	69% (368)	63% (111)	78% (98)	64% (88)	76% (71)
Stipend	65% (251)	70% (120)	57% (70)	-	65% (61)
Opportunity to work with teachers from other schools	64% (342)	61% (105)	68% (86)	64% (90)	66% (61)
Possibility of increasing my control over the curriculum I teach	58% (312)	60% (105)	67% (85)	57% (81)	44% (41)
Opportunity for interdisciplinary work	55% (287)	52% (89)	59% (74)	57% (76)	51% (48)
Access to academic facilities	28% (149)	25% (44)	27% (34)	29% (41)	33% (30)
Opportunity to have my course of study recognized for credit in a degree program	25% (75)	47% (32)	-	23% (31)	13% (12)
Opportunity to have my work published	24% (82)	12% (14)	-	23% (31)	40% (37)
Access to academic facilities	14% (10)	14% (23)	14% (17)	-	14% (10)
Access to athletics facilities	8% (37)	9% (15)	3% (4)	10% (13)	24% (5)

Exhibit reads: Ninety-three percent of all Fellows said that the “opportunity to develop materials to motivate my students” was an important incentive for their participation in a teachers institute.

Source: Yale-New Haven Teachers Institute Teacher Survey, 1999-2001

About two-thirds of the teachers rated opportunities to work with faculty members, to receive a stipend, and to work with teachers from other schools as important incentives. Slightly fewer, but still more than half, rated the possibility of increasing their control over the curriculum they teach and opportunities for interdisciplinary work as important incentives.

These survey findings are important for at least two reasons. First, they suggest that, given a choice, teachers' decisions about participating in an institute are instrumental and pragmatic. They choose and value professional learning activities that they believe will help them do their jobs better with respect to motivating students, increasing their mastery of content, and improving the quality of instruction. Second, teachers value professional learning opportunities that complement individual study with collaboration with other teachers and, in the case of the teachers institutes, with university faculty who are experts in their academic disciplines.

Organization of the Institute Seminars

Calendar. Three institutes scheduled annual cycles of seminars for late-winter and spring during the regular school year. Typically, these seminars consisted of weekly sessions that extended over several months, augmented by one-on-one consultation between Seminar Leaders and Fellows as development of curriculum units progressed. Final units were often due in the summer so that Fellows could complete their research and writing tasks on more comfortable and less-pressured schedules.

At the request of Albuquerque teachers, ATI seminars lasted for approximately four weeks and took place between the end of the school year and the beginning of summer sessions. This allowed Fellows to take summer jobs. Seminars met several times a week and Fellows were expected to begin their reading assignments prior to the first seminar session. This very compact schedule departed significantly from practices at the other demonstration sites and at Yale-New Haven Teachers Institute. It meant that Fellows had to complete their reading assignments and move very quickly through the first phases of developing their curriculum units, putting them under substantial pressure to work their way through the seminar materials quickly and then build on them to inform their preparation of curriculum units.

Seminar topic selection. Teacher engagement in the seminars—and in an important component of teacher leadership—began just as soon as Fellows began identifying potential seminar topics with institute Directors. Although particulars of this process varied across institutes, seminar planning began in the fall or as early as the previous spring with a survey of teacher interests and suggestions for seminar topics. Teacher Representatives in schools targeted for participation distributed the surveys to their colleagues and, subsequently, reviewed the

suggestions with institute Directors and winnowed them down to a manageable number, often by combining topics that were related. For example, 15 individual suggestions for seminars on contemporary issues and problems in race relations in the United States or in the city in which the institute is located might be distilled into a single broad seminar theme on race relations.

Teacher survey data from ATI, HTI, and SATI indicate that significant numbers of teachers in these sites reported having had adequate opportunities to suggest seminar topics, with teachers in Houston being more likely than teachers in the other two districts to report having these opportunities.⁵ In 1999, just under 20 percent of teachers in Santa Ana reported that they had adequate opportunities to suggest topics, with the numbers increasing substantially in the next two years. This pattern probably reflects SATI's relatively slow start in establishing effective communication channels with SAUSD. The relatively higher numbers in Houston probably reflect the institute Director's reliance on an active teacher core to communicate HTI's purpose and goals to colleagues in their schools and the Director's own marketing efforts.

After creating a list of possible topics, institute Directors identified university faculty who might be willing and able to lead a seminar on a topic and invited them to submit a proposal.⁶ Once seminars got underway, it was not unusual for a considerable amount of negotiation to take place between Seminar Leaders and Fellows about the definition of seminar topics, seminar content, and materials that might be useful. The HTI Program Handbook for 2001 indicates that:

The first meeting of the seminar decides questions of each seminar's conduct and syllabus and acquaints seminar members with the projects [development of curriculum units] they will pursue individually....The second meeting should include a discussion of the curriculum unit topics Fellows have chosen. The seminar will also make final decisions on common readings to be discussed at subsequent seminar meetings.

This guidance reflects expectations for collegiality between Seminar Leaders and Fellows as they develop the content of seminars, as well as attention to the individual interests and needs of Fellows as they select topics for in-depth study and unit development.

⁵ These data are part of the responses to a multi-part survey item included in the Yale-New Haven Teachers Institute Teacher Survey.

⁶ In a few instances, institute directors invited individual faculty members who they thought would be particularly effective seminar leaders to propose a seminar topic. This was a way of getting these faculty involved in the institutes

More generally, Seminar Leaders distributed syllabi at the start of seminars and invited input from Fellows. Negotiations about specific foci continued as seminars progressed and certainly represented one of the hallmarks of the norm of collegiality envisioned in the institute model.

Across institutes, some seminar topics had a distinctly local or regional flavor. Several ATI topics pertained to native cultures of the Southwest, along with archeology and environmental issues in the area. The titles of these seminars reflected their topics and included, for example, “The Indo-Hispanic Cultural Legacy,” “Political Cultures in New Mexico,” “The South Valley, the Environment, and Future Development,” and the “Spirit of the Rio Grande/Rio Bravo: Culture, Environment, and Bioregionalism.” These seminars also featured trips and field work in local sites. Similarly, several seminars in Pittsburgh concentrated on that city’s culture and history. Examples included “Pittsburgh Writers,” “Interdisciplinary Approaches to Pittsburgh History,” and “Pittsburgh’s Environmental History.”

Overall, the process of selecting seminar topics resulted in choices that reflected the intellectual interests of both Seminar Leaders and Fellows. Thus, these decisions reflected longstanding traditions of academic freedom in higher education. From the district perspective, what was missing from the process of selecting the seminar topics was systematic attention to district needs and priorities for curriculum development and instructional improvement. To be sure, the district partners did not express concerns about this, although if they had been at the table when the decisions were made they might have had questions.

Seminar Leaders, seminar structure, and discourse. University faculty who led seminars took on an unfamiliar and demanding role. The following excerpt from an HTI Orientation Guide for Seminar Leaders (published in 2001) captures the fundamental challenges of the task and the tensions that are inherent in it. In particular, faculty members had to balance their role as expert with the expectation for collegiality in relationships with individual Fellows:

While it is true that faculty know a great deal more about their subjects than do the Fellows, the Institute calls on Seminar Leaders to take on the seemingly contradictory role of colleagues, for the Fellows are that, as well, since all share the common ground of being professional teachers. Though some of the Fellows’ intellectual skills are not as developed even as some of the faculty’s undergraduates, the UH faculty member should view his or her role in the writing and criticizing of curricular units as that of a demanding editor of a colleague who in many ways is still a peer. This can be a difficult role to maintain, but it is an important one. The Seminar Leader will also encounter Fellows who have the highest intellectual capacities and who may be measured on a scale with the best graduate students. The Seminar Leaders will need to find ways to help both the most advanced teachers and those who are struggling to keep up.

Not surprisingly, the structure of individual seminars varied as Seminar Leaders approached their difficult roles in different ways. In some seminars, particularly during early sessions, the first part of the seminar was devoted to a more or less formal presentation by the Seminar Leader and the second part to discussion among participants. In other seminars, much of the period was spent discussing seminar topics and materials. Seminar Leaders also invited Fellows to prepare and lead discussions on seminar topics. And, as noted above, some seminars included visits to local sites.

Members of the study team observed Seminar Leaders and Fellows interacting in a variety of ways. Some seminars were organized as lectures or presentations by the Seminar Leader; some were presentations by Fellows; some were question and answer sessions, where the Fellows' particular interests and questions drove Seminar Leaders' presentation of materials; and some were discussions led by a Fellow, with the Seminar Leader participating with other Fellows. The following examples illustrate the diverse ways in which Seminar Leaders interacted with Fellows in seminar sessions:

For the first four weeks of a HTI seminar "Adolescence and Alienation," seminar Fellows read and discussed readings chosen by the Seminar Leader on alienation as construct and its development as a theme in literature. The remaining seminar meetings were organized around a discussion of the texts that Fellows intended to use as the basis for their curriculum units. Each Fellow led an hour long discussion on the text he or she had selected. The Seminar Leader explained that these presentations were not intended to focus on what Fellows planned to teach in their classrooms. Instead, all of the Fellows in the seminar were to read a selection from the novel or piece of literature under discussion, and the Fellow leading the discussion was to use the seminar as a sounding board to refine the ideas and themes he or she was developing for his or her unit. At meeting we attended, a Fellow lead a discussion on *Black Boy* by Richard Wright, exploring the ways in which the author represents the theme of alienation in the novel. The Fellow leading the discussion had prepared questions meant to spark discussion of the events and imagery in the novel that he intended to explore in his unit. Most of the seminar participants contributed to the discussion. The Seminar Leader made one or two observations during the course of the hour that connected the group's observations of *Black Boy* back to concepts about the formation of identity discussed at earlier seminar meetings.

A second HTI seminar on probability and statistics entitled "Figuring the Odds: Learning to Live with Life's Uncertainties" was devoted to the investigation of classic problems in probability and statistics, including dice games, the Prisoner's Dilemma, and the Monty Hall problem. The Seminar Leader opened a seminar meeting near the end of the semester

with a presentation on “remarkable coincidences,” and demonstrated strategies for calculating, for example, the probability that two people in a room will have the same birthday. (In a room of 80 people, there is a 99 percent chance that two of them will have the same birthday.) The Seminar Leader went on to demonstrate several computer programs that he had written to simulate experiments in some of the problems that the seminar had considered earlier in the semester. For example, one program divided a population of any given size into two groups, took repeated random samples of any given size, and predicted the population distribution based on those samples. The program demonstrated in an empirical way the effects of sample size on the accuracy of population estimates. Several Fellows expressed interest in using these programs in their own classrooms, and asked questions about how the programs could be made to work in a Windows-based operating system. Fellows made additional requests for simulations of other probability problems they had worked on that semester. These requests led to a discussion of how computers generate random numbers. The Seminar Leader agreed to keep working on the computer simulations and distribute a disk of programs for teachers to use in their own classrooms at the end of the semester.

In the first hour of each meeting of “The Physics of Science Fiction,” Seminar Leader gave a lecture on the science that informs the settings and problems encountered in science fiction novels. At a meeting near the middle of the seminar cycle, he presented the current debate among physicists about what the universe will be like in the far, far distant future. Many science fiction novels are millions or even billions of years in the future, but what do scientists know about what the universe will be like then? The universe is currently expanding. Physicists theorize that measuring the amount of matter in the universe is the key to predicting whether it will continue to expand or, overcome by gravity, collapse back in on itself. Over the course of an hour, the Seminar Leader reviewed the problems scientists have encountered in attempting to measure the amount of matter in the universe, the rate at which the universe is expanding, and the distance between stars, and the strategies they have used to address them. Fellows listened intently to the Seminar Leader’s lecture, but with little comment. In the second hour, the Seminar Leader handed out copies of science fiction stories that drew on the scientific concepts he had just presented, and suggested additional authors and stories for Fellows to consider in working on their units. In the remainder of the hour, Fellows shared their ideas for units that they were currently writing up in prospectuses.

The evaluation team interviewed many teachers who valued the seminar dialogues and said that these interactions “opened (their) eyes to a number of possibilities that they had not thought about.” Or as one teacher put it: “I re-investigated topics I had already taught and got new ideas from colleagues who

made interdisciplinary connections that were not obvious to me at first.” To be sure, not all seminars and seminar sessions that the evaluation team observed included opportunities for this kind of professional discourse, but still there were many examples of such conversations.

Seminar Leaders placed varying amounts of emphasis on the development of units. The majority of Seminar Leaders interviewed reported building time for presentations and feedback on curriculum units into seminar meetings throughout the duration of the institute, with the proportion of time devoted to curriculum units increasing as the seminar progressed. Some Seminar Leaders built time for work on the units into every seminar meeting. One Seminar Leader reported that he spent half of each meeting throughout the semester working on units, and that he had purposefully limited general reading assignments in order to free up time for curriculum writing. At the other extreme, two faculty members reported that they planned to devote almost no seminar time to the units until the last meeting or two in order to reserve as much time as possible for reading and discussing new books. Several Seminar Leaders commented on this apparent tension between using seminar time to work on new material and using it to support the development of units. As one faculty member explained:

If you do too much of “how does this point translate to this curriculum unit?” then that’s too much like technical assistance for writing curriculum units. [But] sometimes I feel like I should roll up my sleeves and help them write units. I could develop the seminar around the writing of units, but that’s not the point—there always seems like there is a tension between dual goals—seminar learning vs. curriculum units.

Despite these concerns, almost all interview data, as well as Seminar Leaders’ written accounts of their experiences in the institutes’ annual reports, indicate that Seminar Leaders generally found their participation to be a rewarding learning experience or at least an opportunity to reflect on their approaches to working with undergraduates or graduate students in the regular university setting. Many said that they simply enjoyed working with institute Fellows, whom they got to know as eager learners. They also commented that they learned a lot about local school systems and the work lives of teachers, and that these lessons increased their respect for teachers.

Challenges reported by Seminar Leaders included adjusting their expectations and seminar content to Fellows’ needs and interests. Here, it should be noted that Fellows and Seminar Leaders brought vastly different backgrounds and expectations to seminars and Seminar Leaders had to address these differences. Responding to the Seminar Leaders’ survey, which is administered by each of the institutes, an HTI Seminar Leader explained it this way:

Because the Fellows were all new to the discipline of philosophy, I fear that some of them found my own ways of discussing values too abstract or

indeterminate: they wanted actual *lists* of American values which they could apply very directly to the subject area...they planned to teach. My idea was to present broad film genres and to generate discussion about the types of values they tended to address and how they did this. Sometimes this seemed a bit frustrating to the Fellows because it did not lead to clear enough results. I think that I would try to do a better job at this if I were to teach this topic again.

A PTI Seminar Leader reflected on her experiences and the adjustments in work load that she made:

The first time I led a seminar, I went in with the expectation that it would be a graduate seminar. I had expected more than the teachers wanted to do. For example, I assigned weeks to teachers, to read and lead discussion. They gave me bad feedback...as a result. This year I have had the teachers do 15-minute presentations. They like that—they don't want to be responsible for a whole class.

Another PTI Seminar Leader offered the following reflection on pedagogy from her experiences:

I am continually learning about letting teachers take control. I took awhile to figure out what level of reading is appropriate—it's reading for a high-level undergraduate course, not a graduate course. Learning is more about dialoguing than lecturing. Teachers are always willing to talk, unlike undergraduates.

In the end, most Seminar Leaders were able structure and adjust the seminars to accommodate Fellows' varied interests and levels of skill and understanding of the seminar topics. Seminar Leaders were less successful at solving the problems associated with the preparation of the curriculum units, including clarifying their role in helping teachers create solid units and ensuring that the units were of consistently high quality.

Experiments with the Structure of the Seminars

The teachers institutes that experimented with alternative structures attempted to tie the work that teachers did in the institutes more explicitly to district curriculum concerns. For example, using federal grant funds earmarked for curriculum development in content areas, PTI worked with its institutional partners to offer seminars in American history and physics. Both seminars targeted eighth-grade teachers and both focused explicitly on elements of the district curricula in the two content areas.⁷ Unlike the original teachers institute

⁷ A third seminar, in mathematics, supported by these grant funds was scheduled and later cancelled.

model, in which teachers selected seminar content, content for these seminars was stipulated by grant requirements. Also unlike the original model, planning these seminars involved district staff and Seminar Leaders. In addition, district staff were involved in recruiting teachers and in guiding the development of curriculum units. Finally, a district curriculum director participated in seminars.

The purpose of the district's involvement in these PTI seminars was to encourage the development of a bank of curriculum materials tightly aligned with district standards that would be available to all teachers. As the seminars progressed, there were some disagreements between Seminar Leaders and the PPS staff member who worked with the seminars. These disagreements focused on seminar content as well as expectations for the curriculum units. Several interviewees indicated that teachers who had been recruited by the district to participate in the seminars had not been fully informed about expectations for curriculum units, both in terms of the amount of time necessary and the actual unit content. Initially, the PPS staff member insisted that units meet the terms of the grant award: three lesson plans using three different primary sources related to the topic. Ultimately, PTI's Director helped resolve these differences by insisting that all seminar participants meet PTI's standards for curriculum units.

According to the PTI website, the institute currently offers two slates of seminars.

In the second departure from the institute model, ATI convened a seminar at a district high school during the regular school year (as opposed to standard ATI practice of scheduling seminars between the end of the school year and the beginning of the summer session). The seminar was targeted to teachers who were interested in addressing environmental issues in their classrooms. In addition to early missteps around seminar scheduling and logistics, teachers reported misunderstandings about the purposes of the seminar and the level of work required. While the Seminar Leader expected to convene a seminar consistent with the institute model, teachers sought practical hands-on help in classroom instruction. Based on interviews, it does not appear that these issues were satisfactorily resolved.

As the foregoing discussion suggests the seminars were uneven as Seminar Leaders and Fellows found themselves in unaccustomed and sometimes uncomfortable roles. In some cases, Seminar Leaders and Fellows found it difficult to work in roles other than the traditional "faculty" and "student" roles. Expectations for their new roles were not always clear with the result that seminars included some early negotiations about the roles and about expectations for the content of the seminar and the curriculum units that would be developed. When the roles and expectations for the seminar were clear, seminars could be stimulated professional learning opportunities. Indeed, as we heard often in interviews with teachers, the seminars were "some of the best professional development that I ever had."

The Preparation and Use of Curriculum Units

According to the program model, curriculum units are intended to provide a rich intellectual and academic context for classroom instruction. Teachers are to develop curriculum units consisting of an essay that provides the background and rationale for the unit, several lesson plans and instructional strategies, and an annotated bibliography. The essay portion of the unit draws connections between seminar content and curriculum. In addition, essays could describe the context in which the Fellow anticipated that the unit would be taught as well as references to the state and local content standards that it addressed. Fellows present their individual insights and interests in these essays, with these discussions often spanning traditional disciplinary boundaries. The sample lesson plans contain concrete examples of how Fellows planned to teach components of the unit and give other teachers a base to build their own lesson plans on. In addition to demonstrating the research that informed each unit, the bibliographies could also serve as resources for other teachers who might be interested in using the units in their own classrooms.

Virtually all of the Fellows and Seminar Leaders interviewed during the course of the evaluation agreed that the preparation of curriculum units was a source of anxiety and challenge, and, for many teachers, of satisfaction when they saw their work formatted and bound for publication and dissemination. To demonstrate what is possible, the outline below highlights a curriculum unit prepared by a Fellow at HTI:

“Improvised Jazz and the Transcendental Experience” is designed for use in high school English classrooms. Two goals provide the unit’s basic structure. They are:

- The unit will afford students the opportunity to experience the major works of Walt Whitman and Ralph Waldo Emerson in a meaningful and engaging way.
- The unit will introduce students to a form of art they are generally unfamiliar with: improvised jazz.

The unit is built around the idea that improvised jazz provides a tangible example of the transcendental experience Whitman and Emerson describe. Though the unit as written is most immediately useful to English teachers, I believe that, with some adjustment, the unit could also be useful to high school music teachers who want to provide their students a more meaningful understanding of improvisation.

The remainder of the unit articulates the rationale for connecting transcendental thought and improvisational jazz, with examples from the

philosophers and a thoughtful discussion of the music of John Coltrane and Miles Davis and a short story by James Baldwin. The essay also describes the Fellow's frustration at his students' lack of interest in the transcendentalists and how the idea for the unit emerged from his efforts to spark that interest by conveying something of the history and meaning of transcendentalism in a way that might make sense to his students. Interspersed in the text are examples of specific teaching strategies that describe classroom activities around reading and listening. There are also several sets of questions to guide class discussions. Finally, there is a bibliography of print materials and compact discs.

This unit is at once a resource for the Fellow who prepared it and a personal intellectual statement. It is quite ambitious in its substance as well as its expectations for students. Other units examined for this study were just as ambitious in substance and expectations. Some drew on several disciplines; others remained in a single discipline.

Support strategies. Not all units were as solid as this one. Many Fellows found preparing a curriculum unit daunting. Indeed, Directors and many Seminar Leaders agreed that one of the points at which Fellows were most likely to drop out of the institutes was when the unit prospectus—the first step in preparing the unit—was due. As the data presented earlier in Exhibit 1 show, about 80 percent of the Fellows who enrolled in seminars completed a curriculum unit. The exception to this general pattern was in the HTI, where 60 percent of the Fellows in 2000 and 53 percent in 2001 completed a curriculum unit. Fellows, Directors, and Seminar Leaders gave several reasons for why preparing the units was so challenging, particularly in the early phases of the demonstration program. (It is important to note that Fellows did not complete units and other requirements for a variety of reasons, including health and family concerns, as well as unexpected conflicts with work assignments.)

The first difficulty, according to interviewees, was that many Fellows and Seminar Leaders simply did not understand the concept of a curriculum unit and, therefore, had not fully anticipated what it would take to prepare one. Early guidance from the institutes was brief and focused on mechanics (e.g., formatting, use of references, length), with much less attention to rationale and content. There were few models on hand to guide preparation of the units. As a consequence, Fellows and Seminar Leaders had many questions about the purposes of the components, their length and format requirements, and content expectations. In short, neither Fellows nor Seminar Leaders were completely certain about what was to be produced, and Seminar Leaders, in particular, were unprepared to guide Fellows and give them feedback. Seminar Leaders said that while they could comment on the substance of the units, especially the conceptual essays, their unfamiliarity with appropriate instructional strategies and state and local K-12 curricula and standards made them uncomfortable analyzing other components.

A second difficulty was that at least some of the Fellows were either inexperienced writers or had not done a lot of writing for a long time, or both. Seminar Leaders reported that some Fellows had difficulty reading and synthesizing extensive texts. Others found it difficult to narrow down a topic, and instead took on a topic that was too broad or unfocused.

As the institutes evolved, the Directors tried to address these problems, providing several kinds of support to Fellows and Seminar Leaders. First, in their initial communications with prospective Fellows, especially in orientation sessions, they gave considerably more detail about the time commitments required for full participation. Second, they developed more comprehensive written guidance for preparing curriculum units. At API, HTI, and PTI, in particular, this guidance clarified expectations for the units, as well as the steps in preparing them. The revised guidance documents underscored the notion that units were the products of intellectual collaboration between the Fellows and the Seminar Leaders, and that Fellows were to prepare the units for their own use and for use by their colleagues. They also highlighted the importance of writing sustained, narrative prose. Finally, with some variation across institutes, the guidance expanded expectations for lesson plans, adding discussion of the setting or context in which the lesson was to be used and the students for whom it was intended. Guidance at ATI and PTI also directed Fellows to indicate how their units align with state and local content standards. This guidance placed more emphasis on linking the units to the local curriculum and on an extended discussion of pedagogy.

A third strategy to help teachers prepare their units consisted of voluntary workshops on writing and using the library. These workshops, often conducted by veteran Fellows, focused on the practical details of writing curriculum and finding and using print and electronic resources.

Assuring that the curriculum units were of high quality was an important task. Again, institutes adopted a variety of strategies to assure that units met the requirements set for them. As already noted, written guidance, which evolved over time, explained expectations for the structure of units, as well as the particulars of formatting and referencing. Fellows could also review earlier units for models.

In addition, the sequence of preparing units was more explicitly incorporated into seminars. Fellows were expected to submit a prospectus on their units fairly early in the seminar. Next, they were required to submit a draft unit, and finally, the final version. This arrangement had two advantages. First, it compelled Fellows to begin working on their units early and to continue concentrating on them during the course of the seminars. Second, this schedule contained several opportunities for feedback on the units from Seminar Leaders and other Fellows. Early opportunities for review and critique on the prospectus meant that Fellows could sharpen or change the focus of their units before they

had invested too much time or energy on topics that were overly ambitious or not well focused. The subsequent presentation of drafts was then able to concentrate on feedback on lesson plans, instructional strategies, and substance of units. Fellows had final responsibility for completing and submitting their units to institutes.

Perspectives on the Quality of Curriculum Units

As the foregoing discussion suggests, completing curriculum units according to expectations and specifications set by the institutes was difficult, time-consuming work. The fact that about 80 percent of the Fellows who began the seminars completed a curriculum unit represents a significant accomplishment for Fellows themselves and for institutes. Many of the Fellows who were interviewed saw the experience of writing a curriculum unit as one of the most valuable components of the institute because it forced them to deal creatively and analytically with the seminar material. Others maintained, however, that the writing required of them was too time-consuming and discouraged many of their colleagues from completing the seminars.

Across the board, Seminar Leaders were enthusiastic about the potential of good units to translate seminar content into rich new learning opportunities for students. When asked to describe what a good unit looked like, Seminar Leaders said that the most interesting and highest-quality units took an idea or a theoretical framework from the seminar and used it to buttress a compelling set of learning activities. Seminar Leaders were particularly impressed with teachers' ability to translate content into lessons that would engage students. As noted earlier, they recognized that they had a somewhat limited understanding of the needs and learning styles of the students in Fellows' classrooms, and expressed admiration for Fellows' ability to make these translations.

At the same time, almost all of the Seminar Leaders interviewed reported that the quality of the finished curriculum units varied considerably. In some cases, they noted that the intellectual frameworks and new ideas they had worked to convey in their seminars were not reflected well, or, at all, in the units. Several Seminar Leaders claimed not seeing any evidence of the seminar experience adding value to units, and wondered whether Fellows could have written the units just as well without the seminar. Other Seminar Leaders worried that the intellectual toughness needed to produce a high-quality unit might be beyond some teachers, especially those with little prior exposure to the kind of writing required to produce a solid unit. The following comment from a Seminar Leader echoes those of a number of others:

The units [this year] are a real range. Some are great, the teachers know the drill. Others have really struggled with writing a narrative, because they are new to this. We've reviewed second drafts and some need lots of

work. Some need focus—they are trying to do too much, I need to pull them in, to focus. Some need a good bit of help with writing.

Seminar Leaders with more than one year of experience in the teachers institutes described the ways in which they had adjusted their own teaching and feedback to Fellows to support the development of high-quality units. One Seminar Leader commented that he had learned to model the kind of teaching that he hopes will show up in the units:

I'm trying to make it tighter—the things we are doing in the seminar might be models of what they might do in their classroom. I try to make sure our discussions model pedagogically what they might do. We are at a high level of discourse, [but] I'm taking the translation more into account. . . . I had to see some units [last year] and be disappointed by some in order to realize that I had to make that connection.

Other Seminar Leaders commented on the ways that they had adjusted the feedback they gave on early drafts:

The first year I did a seminar, I was surprised at how difficult the narrative is for teachers. Now I do a better job. We talk about the audience and the expectations for good units. I manage interactions between teachers, so they can learn from each other.

In my first year of reviewing units, I looked at the organization, the structure more. Now I point out places they can expand—that's more important for the narrative. There may be a common conceptual framework from the seminar, but I have no assumptions that it will show up in the units. Hopefully, teachers keep it in their heads as they are working.

In some cases, Seminar Leaders expressed frustration with specific instances when Fellows refused to make the changes that they suggested and, more generally, at other times when they could not help Fellows adequately with their writing.

My [graduate and undergraduate] students are used to getting correction, but the [teachers institute] is more collegial—one teacher was upset with the number of comments I put on her paper.”

There is a range of quality. You do what you can, but you can't change a person's whole life trajectory—you just accept that some will be better than others. Some are very exciting and grab you, and some are not.

In the end, despite concerns about the quality of some of the units, a number of people interviewed argued strongly that, for some teachers, just

completing a unit was an important accomplishment that boosted their confidence and had the potential of adding a measure of intellectual depth and rigor to their professional practice. Aside from reports from satisfied Fellows there was, at the end of the demonstration project, there was little evidence to suggest that this potential was realized in very many classrooms.

Use of curriculum units by Fellows. All but a few of the teachers interviewed during site visits and by telephone, and who had completed a curriculum unit, reported that they had used the unit in their classrooms. Many of these teachers were enthusiastic, saying that:

It was the most successful thing that I had done all year with these kids. The kids were engaged and interested.

It worked quite well. If I rated the unit the first time I used it, I'd give it a B+. I used it almost completely as written.

It worked very well. I used it as it was written. It ran perfectly. Because of conversations I had during the seminar, I felt comfortable communicating the lesson objectives to students and explaining how the district standards were related.

I expanded the unit and wrote a grant to get materials [to expand it and support additional use]...the students are excited about working on something that is hands on.

Some teachers also reported that they tried parts of their units—a pilot test of sorts—during the development phase to see if their ideas would work in their classrooms. For all of these teachers and others who used the units, the units became valuable instructional resources, which, among other things, piqued student interest—a bonus in large urban school districts.

But other teachers' use of the units did not go as well. Teachers made the following comments about their initial experiences in using their curriculum units:

I had too much information. Rather than trying to cram it into three weeks, I should have spread it out over the academic year.

It did not work real well. I understand now what I need to do differently. We should have read the stories together rather than me just giving it to them to read on their own. [However] the class discussion went well, as did the problems I asked the kids to solve.

Bringing materials down to younger students was somewhat of a challenge. I had to stretch myself to make sure it was understandable to a 7-year old.

These examples and others show that teachers whose curriculum units did not achieve their intended outcomes in the classroom did reflect on their experience and gave serious thought to how to refine it.

A very small number of Fellows, less than five percent of interviewees, reported that they had not been able to use their units. The reasons were typically beyond their control and included being reassigned to a new teaching position for which the unit was not relevant and the lack of appropriate materials and equipment.

Dissemination of curriculum units. All four institutes disseminated the units throughout the districts. Copies of bound volumes, commonly organized by seminar, were distributed to schools, school libraries, and district offices. The volumes were in evidence in a number of district offices when the study team interviewed there during the second and third rounds of site visits. Units were and continue to be posted on institute websites so that interested readers can view them. In addition, several institutes published their curriculum units on compact discs.

Despite this widespread distribution of curriculum units, there was limited evidence at the end of the evaluation that other teachers were using them. For example, some Fellows reported that colleagues had asked to see copies of their units, but they were unsure what happened next. Teachers had not provided them with any feedback indicating what they thought of a unit or how they had used all or part of it.

Similarly, principals and district leaders reported being aware of the units and saw them as important products of the institutes, but they had not yet examined them carefully for ways that other teachers in their schools and districts might actually use them. Here, it is important to note that the evaluation team did not attempt to collect data on the circulation of units that had been placed in school libraries or disseminated through other means. Nor did the evaluation team attempt to gather information about the number of visitors to institute websites or about the extent to which visitors may have examined and subsequently used all or parts of curriculum units in their schools and districts.

The potential for use of the curriculum units by Fellows and by other teachers. As the examples reported above and others that the evaluation team heard indicate, many teachers used their curriculum units at least once. Some concluded the applications went well, others concluded that modifications were in order. In either case, the institute model did not include any support or assistance after completion of the unit. Given the variation in teacher knowledge and experience in various content areas as well as the struggles associated with preparing the units it is reasonable to conclude that at least some teachers did not make much sustained use of the units. When viewed as a model of professional

development, the seminar experience can be seen as lacking any systematic follow up to ensure implementation and use of the units to improve classroom instruction. This is not to suggest that the institutes, Seminar Leaders, or directors should have tackled the task of providing extended follow up. It is to suggest that in the absence of follow up there is less likelihood that the units will be used effectively or that inadequate units will be modified to make them more useful.

What about the possible use of the curriculum units by other teachers? Teachers are notorious “borrowers” and “scavengers” in the very best senses of both of these terms. They are constantly looking for ideas and materials that will stimulate their students and for learning activities that will work in their classrooms. Teachers who look in the curriculum units will find many ideas to borrow. They will also find heartfelt cautions about what to do and not to do with various materials and where the pitfalls are in particular instructional activities. Teachers may even find entire lessons that they can use or easily adapt to their own needs. In these ways, the units have considerable potential for use by other teachers. At the same time, the use of the units may be limited by their structure and the length and content of the narrative essays. The essays are lengthy and very much reflect individual, often personal, perspectives on the content of the units and why they are important to students. It is unlikely that teachers searching for things they can use immediately will have the patience or the inclination to work their way through the units to find useful nuggets of curricula and instructional activities.

Leadership in the Teachers Institutes

As in most organizations, one of the keys to the success of teachers institutes is effective leadership. A special feature of leadership in teacher institutes is that it is distributed among institute Directors, who are responsible for an institute’s overall operation, and Fellows, who assume major roles in planning and designing their own professional development. The institute model offers two sets of opportunities for teachers to exert leadership. The first, described in the previous section, is in the choice of seminar topics and content. The second dimension of teacher leadership seeks to actively engage Fellows in a variety of organizational tasks.

Responsibilities of Institute Directors

Institute Directors had a number of responsibilities in the overall operation of teachers institutes. Among other things, Directors’ portfolios included:

- Setting the stage for institute organization and activities by communicating about and building understanding of the program model and its underlying assumptions

- Identifying, organizing, and orienting cadres of teacher leaders to assume key roles in institutes
- Recruiting and orienting university faculty to serve as Seminar Leaders
- Organizing fundraising efforts, often with support from university development offices
- Overseeing final formatting and dissemination of curriculum units
- Participating in national meetings of the demonstration project and reporting on institute activities, including expenditures and progress, to local partners, to the Yale-New Haven Teachers Institute, and to external evaluators

One of the hallmarks of leadership in HTI and PTI was the strength of their Directors' commitment to the Yale-New Haven Teachers Institute model and their ability and willingness to communicate and fully implement its vision in these two demonstration sites. In Houston, the Director invested especially large amounts of time and energy to developing communications materials that explained the institute to teachers and university faculty. These materials combined extensive discussion of the philosophy and assumptions that underpin the institute model with detailed explications of individual roles and responsibilities. A number of HTI Seminar Leaders and Fellows commented on these efforts and their payoffs for the institute. Seminar Leaders said that the Director had "done a good job of explaining our role, particularly the difference between being a Seminar Leader and being in a typical graduate or undergraduate course." During the last round of data collection, Fellows explained that "[they] had lot more information and guidance than earlier and that Fellows understood the institute better, particularly the requirements for the units."

The Director of PTI had been a well-respected leader in the Pittsburgh Public Schools and the Pittsburgh community. Her experience and reputation lent PTI a degree of credibility from the start and opened many doors in schools and the school district. Her leadership, in contrast to that of Directors in other demonstration sites, was explicitly attuned to aligning the institute's activities with local education priorities while still maintaining the integrity of the program model.

Opportunities for Teacher Leadership

Fellows who enrolled in teacher institutes had a number of opportunities to guide their own professional development. Early on, they actively helped

select seminar topics with institute Directors. This was followed by opportunities for Fellows to communicate their interests and needs to Seminar Leaders and to negotiate the selection of seminar content.

This is not to suggest that Fellows dictated the content of seminars. They did not, and, in some instances, they left much of the choice of actual seminar content to Seminar Leaders. Nevertheless, this kind of negotiation and input illustrate ways that teachers can and did shape their professional learning. However, perhaps an even more important example of teachers taking the lead in their own professional learning was their selecting a seminar topic or issue and developing a curriculum unit around it for use in their classrooms.

The second dimension of teacher leadership involved Fellows in their institute's organizational tasks. Fellows recruited teachers to participate in institutes, reviewed teacher applications, coordinated seminar activities, planned other institute activities, such as workshops to support curriculum writing, and communicated about the institute and institute activities in the districts and at national meetings convened by the Yale-New Haven Teachers Institute.

The formal designations for these leadership roles were Teacher Representative and Seminar Coordinator. Ideally, there was a Teacher Representative assigned to each school targeted for participation in institutes. Teacher Representatives were expected to communicate with their colleagues about the institute and its activities and to share their colleagues' questions and concerns with the institute. In addition to serving in this liaison role, Teacher Representatives participated in the seminar topic selection process described earlier and some Teacher Representatives engaged in one-on-one recruiting. "If I know another teacher in my school who might be interested in a particular seminar, I push them to apply. This can be much more effective than just putting a flyer in the mailbox," one remarked.

Seminar Coordinators assisted Seminar Leaders in communicating expectations for participation in the seminars and for preparing curriculum units. Coordinators in HTI and PTI met regularly with Directors to review seminars and to discuss any problems or concerns that might come up. Coordinators in ATI and SATI played similar roles, but communications were less formal and more sporadic. PTI's Seminar Coordinators also reviewed curriculum units for pedagogy and alignment with content standards.

In both HTI and PTI, Directors devoted considerable time and energy to regular meetings with Fellows to carry out the various tasks. To be sure, not all teachers were interested or willing to take on these responsibilities, and, in the end, the study team estimated that groups of between 12-20 teachers in each institute played consistently active roles in decision making. In her final report, the Director of PTI noted that while one group of teachers had been very active in

the institute, such a group could assume ownership of the institute at the expense of other teachers becoming involved.

Partnerships

One of the early tasks in each of the four demonstration sites was to create working relationships with institutions of higher education and school districts. This section of the report discusses the evolution of these working relationships and some challenges associated with them. This section also looks at how the Yale-New Haven Teachers Institute was a critical partner by sharing its extensive experience with the new institutes and fostering a network through which all the institutes could build a collaborative spirit.

Evolution of Local Institutional Partnerships

While each of the institutions of higher education had worked with participating school districts before on professional development and education reform, they had usually done so through their colleges of education or teacher training programs. These past partnerships had generally not included the colleges or faculty from liberal arts and sciences. One exception to this pattern was the relationship between the Office of Educational Partnerships at UCI and SAUSD. In this case, the institute was one of a number of university-school district partnerships around teacher professional development in the Orange County area of Southern California. In Pittsburgh, Chatham College offered a highly regarded undergraduate teacher training program that has longstanding ties with PPS.

By design, the institutes were housed on higher education partners' campuses and their Directors were employees of these institutions, with each reporting to a university administrator. Directors had no direct reporting responsibilities in partner school districts, where typically a member of the central office staff—an assistant superintendent or director of professional development—served as primary liaison to the teachers institute. One of the initial challenges for institute Directors was to establish solid working relationships with their institutional partners.

Doors did not always swing open right away, but each Director worked hard to communicate the institute's vision to partner organizations and ensure that adequate resources were available. In these efforts, Directors had varying levels of success. In Pittsburgh, the fact that the Director had been a well-respected leader in PPS for many years eased the institute's access to the district and immediately lent it credibility. This Director had also gained the respect of one of the institute's higher education partners, which further facilitated access to institutional leaders. In Houston, HTI's Director gained access to HISD's chief

academic officer who quickly saw the potential benefits of HTI and agreed to provide ongoing financial support to the institute. The Director continued to keep the district informed of the institute's work through frequent communications and by inviting district leaders to attend institute forums and other activities. This Director also gradually won the support of UH officials, who agreed to contribute university funds to cover his salary. In Albuquerque, the first Director, and later one of the Co-Directors who was on the UNM faculty, had relatively easy access to the college of arts and sciences. Subsequently, the assignment of a teacher in the Co-Director and later Director's role facilitated access to schools and teachers. Because of changes in APS' priorities and spending in professional development, as well as a difficult transition in district leadership, the second ATI Director had difficulty gaining access to and support from APS leaders, although by all accounts he worked effectively with UNM faculty and administrators.

The relationship between SATI and SAUSD was marked by limited communications and underdeveloped mechanisms for teacher leadership from the outset. As SATI's final report explains, the institute relied heavily on a "lead teacher," who is a teacher who assists the university in launching new programs by organizing other teachers to participate in various kinds of professional development and other programs. The expectation was that this teacher leader would rely on contacts in SAUSD to communicate about the institute. Thus, the institute Director did not become actively involved in communicating with SAUSD. This pattern continued into the planning and scheduling of the third round of institute seminars. At that time, and apparently without consultation with institute Fellows or district leaders about local demand for seminar participation, the Director scheduled ten seminars. With an initial enrollment of about 60 SAUSD teachers—enough to fill only half the seminar seats, the Director invited teachers from nine other school districts and a local community college to participate in the institute. This decision almost certainly diluted the institute's relationship with SAUSD, although it had the obvious effect of broadening the institute's participation base. This arrangement, particularly because it was put in place hastily, precluded any serious attention to establishing opportunities for teacher leadership or even effectively communicating very much about the teachers institute's vision.

At the time of data collection, central office staff and principals expressed generally positive attitudes about the teachers institutes.⁸ In some cases, central office staff had received and reviewed descriptive materials provided by the

⁸ In scheduling our data collection visits, we asked the institute directors to arrange for interviews with district staff with whom the directors worked and who might be knowledgeable about the teachers institutes. Typically, we interviewed one or two district staff, including assistant superintendents for instruction and curriculum and/or directors of professional development. With one exception, we did not interview superintendents, even though several of them had participated in meetings with leaders from the Yale-New Haven Teachers Institute and had expressed support for the institutes in their district. We also asked for opportunities to meet with principals, especially during the second round of visits. Typically, these visits included interviews with 3-5 principals selected by the directors.

institutes and virtually everyone interviewed had seen the volumes of curriculum units disseminated by the institutes. In addition, a number of these officials had participated in one or more annual meeting at the Yale-New Haven Teachers Institute and reported that these sessions had provided good opportunities to learn more about the program model. Finally, based on various anecdotal reports from Fellows and others, and, for some, participation in institute-sponsored events, district staff had concluded that Fellows thought that the institute seminars were valuable professional development experiences and that the curriculum units were potentially valuable resources for the district. Nevertheless, district leaders did not report being involved in making decisions about the institutes and they did not appear to be very familiar with the content of institute seminars or of curriculum units.

With several exceptions, most of the principals interviewed were unfamiliar with the work of the institutes, although they were certainly aware that one or more of the teachers in their schools had participated in a seminar and completed a curriculum unit. Two Albuquerque principals offered positive, albeit different, perspectives on the benefits of the institutes to their teachers and their schools. Not surprisingly, the principal of the high school in which the institute Director had previously worked was familiar with the institute and had become a strong proponent.

I see the kinds of conversations that teachers have in the institute as critical to improving instruction. I want to see more of these in school so I will encourage teachers to participate in the [ATI] and to move these activities into our school.

This principal went on to suggest that he planned to encourage his teachers to make their seminar experiences, as well as the introductory essays of their curriculum units, the centerpiece of the work portfolios they prepare for their performance reviews. "I don't want to evaluate teachers in the standard way. I want [the performance review process] to encourage good teaching. This helps me do that," he said.

The second principal also expressed strong support for ATI as a professional development activity, and, after noting that seven teachers from her middle school had participated in seminars, described a

In the fall, [the seven ATI Fellows] will represent a critical mass that can give us a leg up on improving our instructional program. Because the ATI now emphasizes the new content standards, these teachers will also be able to help all of us work with the standards in our school.

In response to questions about the kinds of support and encouragement that they had received from their principals, some teachers reported that their principals had been supportive, but most said that their principals had not known

very much about the institutes. Reflecting on the lack of involvement by principals, three of the institute final reports, from HTI, PTI and SATI, suggest that communicating more extensively and effectively with school principals should be considered as a way to build support for the institutes and increase teacher participation. These reports did not recommend increased principal involvement in institute operations, however.

Challenges of Maintaining Partnerships

Maintaining strong working relationships is difficult. Looking across demonstration sites, the study team found two primary challenges associated with the task. The first challenge, which is certainly not unique to the teachers institutes, was to maintain the partnerships when changes in leadership or key players took place in one or both partner institutions; the second challenge was to ensure supportive operating environments for the fledging teachers institutes.

Coping with changes in leadership and key players. Each of the four demonstration sites experienced shifts in institutional leadership and key players in partner organizations. In the long term, these changes did not appear to have serious negative impacts on the institutes. Nonetheless, they always required Directors to spend time and energy establishing relationships with new staff. For example, in Houston, Roderick Paige, who was superintendent when the institute was initiated, was appointed Secretary of the U.S. Department of Education. In addition, the district's chief academic officer, Susan Sclafani, left the district to assume a position in Department. As noted above, Sclafani had expressed strong support and commitment to the institute from the start, which lent the institute a degree of credibility in the district. Her commitment of HISD funds to support the institute also added an important measure of stability. After the departure of these two leaders, the institute's Director had to establish a relationship with the new leaders. In this case, thanks in large part to the solid foundation that had been laid earlier, the effort was a success.

In Albuquerque, considerable turmoil surrounded the departure of the superintendent in 2001. In addition, soon after the institute began operations, the district reorganized its professional development system and created new regional configurations of schools. Both of these changes, as well as the district's decision to withdraw its share of financial support for the institute, left ATI in an uncertain and unpromising relationship with the district. Near the end of the demonstration project, the institute Director was still working hard to establish connections with the district's Director of professional development. Similarly, changes in SAUSD's organization meant that SATI's Director had to establish a relationship with new players in the district's professional development unit. In this instance, the head of professional development program embraced the model of the teachers institute as "a beacon" for professional development and offered a vision of the institute as a starting point for more extensive development, field-testing, and refinement of the units as instructional tools for use throughout the district.

There were fewer changes in leadership among higher education partners in the four demonstration sites. In Albuquerque, a new provost was appointed in the second year of ATI's operations and the president of the university left near the end of the demonstration period. Neither transition appeared to affect ATI. In Pittsburgh, there were changes in leadership at Carnegie Mellon and at Chatham College, where the vice-president left for another position and the director of development took a similar position at Carnegie Mellon. The latter change caused some friction between the two higher education partners and raised concerns about the future of fundraising for PTI. But, overall, the transitions did not appear to have serious effect.

Ensuring supportive local operating environments. The institutes depended on institutional partners to provide supportive operating environments and resources—in terms of direct financial support and assistance in identifying funders and preparing proposals. In addition, as new programs in a demonstration project with an explicit model, the institutes required a degree of autonomy to implement the model according to the principles and expectations articulated by the Yale-New Haven Teachers Institute.

The organization of institute seminars, particularly the relationship between institute Fellows and Seminar Leaders, was compatible with the academic norms of institutions of higher education, although the seminars were clearly not designed to be like typical university classes and seminars. At the risk of some oversimplification, consistency with the academic culture of universities and the fact that the institutes were housed on university campuses meant that the bulk of the responsibility for providing congenial environments for the teachers institutes to evolve and mature fell to the higher education partners. This they did by not only providing an academic culture for Fellows and recruiting faculty to design and lead seminars, but also by arranging classroom space, access to libraries and other campus facilities, and, in several sites, parking.

While the academic and organizational culture of higher education partners was compatible with the purposes and operations of the institutes, the situation was somewhat different on the school district side of the equation. For example, most districts provided relatively few opportunities for serious teacher leadership, particularly in the area of professional development. More important, much of the content and format of teacher professional development was set by districts and was linked to district priorities and the implementation of new programs and practices. In contrast, the institutes expected teachers to choose topics for study and curriculum development according to their own professional interests. The institutes were not formally linked to any district reform initiatives or priorities. This is not to suggest that such linkages and alignment were not possible, but rather that they had not yet been established, except possibly through very general requirements that curriculum units somehow address state and local standards.

As in most school districts, policies in the four partner districts supported teacher participation in professional development. At the same time, local requirements for certification and participation in other professional development activities almost certainly forced teachers to choose among activities. For example, new teachers and teachers with relatively few years of experience are typically required to complete a number of graduate courses or a graduate degree program to become permanently certified or to move up the salary schedule. In addition, teachers are frequently required to participate in district-sponsored professional development activities (often in support of a new reform initiative), and they may be expected to serve on various committees. All of these activities are time-consuming. As PTI's Director observed in her final report to the Yale-New Haven Teachers Institute: "Maintaining a pool of interested teachers has also been affected by the increased number of inservice activities sponsored by the school district as it addresses literacy, mathematics and science as its priorities."

An additional small, but important consideration in Houston and Santa Ana, and to a lesser extent Albuquerque and Pittsburgh, is local traffic and driving conditions. Traffic in both the Houston metropolitan area and in Orange County is very heavy much of the day, but particularly during afternoon rush hours. In these cases, teachers can easily spend an hour or more driving to after-school sessions.

Institute Directors could not ease driving conditions, but they were able to facilitate participation in the institutes by negotiating various kinds of professional development credit for teachers who enrolled in seminars. For example, ATI Fellows who were enrolled in the UNM graduate program received graduate credits for participating in the institute. Beginning in 2001, PTI Fellows received increment credits for attending all sessions of a seminar and additional credits if they completed a curriculum unit. At the urging of several Fellows, HTI negotiated an agreement through which Fellows could receive credit toward certification in instruction of gifted and talented students for their participation in the institute. Receiving various kinds of credit was an additional incentive to teachers and helped to reduce the opportunity costs of participation. It also made districts more supportive operating environments.

Flying under the radar. One of the possible inducements for increased district support—in funding, awarding professional development credits, and other policies and practices that might facilitate teacher participation—would be increased district involvement in the work of the institutes. When the study team asked Directors about increased district involvement in activities such as the selection and definition of seminar topics and review and feedback on curriculum units, several expressed skepticism about this type of involvement benefiting the institutes and preserving teacher leadership opportunities. For example, in Houston, following several public affirmations of the district's commitment to the

teachers institute as a professional development option, the Director said that he welcomed the affirmations and sought “continued trust in the model, particularly the importance of teacher leadership.” Since the institute’s inception this Director has improved communications with the district by keeping leaders and staff informed about institute activities and inviting them to participate in institute events. He has not, however, sought more active involvement by the district, preferring to keep the institute out of the bureaucratic swirl of a large urban school district. A second Director also raised concerns about getting caught up in district issues and politics and saw a need to remain “under the district’s radar as much as possible.” A number of Fellows interviewed who were actively involved in institute governance and decision making were also skeptical about the benefits of increased district involvement. Said one:

Sometimes I just don’t think that [the district] really understands or believes in this kind of professional development for teachers. They have their own agenda and they want to be sure that it is covered. We don’t have much say in what happens. In [the teachers institute] we have some control and we get to choose what we study. That just doesn’t happen very often.

Together, these concerns suggest a considerable ambivalence in the institute’s efforts to build and sustain working relationships with partner districts. On the one hand, Directors recognized the need for district support—including financial support and incentives for teachers. At the same time, they worried about the possibility that the price for increased support could compromise key principles of the institute model. Increased district involvement from the central office could perhaps undermine teacher leadership, at least as defined by the institute model. In addition, district involvement in selecting and defining seminar content or in molding expectations for curriculum units to more explicitly meet district needs for curriculum materials could undermine the autonomy of Seminar Leaders and Fellows.

It is difficult to know whether and to what extent these concerns were justified. Districts have legitimate interests in the content and focus of teacher professional development, particularly if they are paying for it directly or through salary supplements and other rewards and incentives. Districts also have a legitimate interest in the content and quality of curriculum materials that are used in the classroom. With the exception of the PTI, the institutes and the institute model does not provide a forum in which these interests can be expressed and factored into decisions about teacher professional development. Teacher skepticism if not downright mistrust that district interests are compatible with their interests may be symptomatic of larger problems in schools and district, including lack of a clear consensus about key goals and priorities and how to achieve them. The reliance on teacher judgments and preferences for the content of the seminars and the units clearly underscores the institutes’ respect for teachers as professionals. This

reliance combined with their relatively small size may have also served to marginalize them as viable sources of professional development in the districts.

The Role of Yale-New Haven Teachers Institute: Leadership and Building a Network

The Yale-New Haven Teachers Institute assumed an important partnership role in the development and operations of the demonstration sites. This role was often difficult and sometimes contradictory. At various times, it was a leader, network facilitator, critical friend, and monitor in the demonstration project. One of the major intended contributions of the Yale-New Haven Teachers Institute was to establish a network, or, as this institute called it, “a league” of teachers institutes that would support and sustain its members and that would also serve as a resource to other sites that may attempt to establish an institute.

Following the award of grants to the four demonstration sites, leaders of the Yale-New Haven Teachers Institute began working with the Directors of the new teachers institutes, small groups of teachers, and university faculty to help them understand the principles of the model and overall expectations for their work over the next few years. Early sessions at Yale modeled seminar activities and included work on curriculum units. These were also occasions to review issues related to the administration of the new institutes and for Directors and others to get acquainted.

Subsequently, drawing on the advice of a national steering committee, the Yale-New Haven Teachers Institute convened annual meetings that brought together representative groups from each of the institutes. These meetings were opportunities for representatives from the demonstration sites to share their experiences and highlight their progress. Institute Fellows were generally very active in these sessions, sharing their insights and the results of their work. Finally, the sessions were forums in which representatives from the five institutes could discuss common concerns and share ideas about how to address them. For example, near the end of the demonstration program, discussions at these meetings focused on issues of sustainability and the need to find ways of assessing the institutes’ impact.

These annual meetings were also important for Seminar Leaders, prospective Seminar Leaders, and district staff who were not familiar with the institutes. Information from institute Directors and others who participated in these meetings indicates the sessions served several functions. First, they were good opportunities for people who were unfamiliar with the institute model to learn about it from leaders at the Yale-New Haven Teachers Institute and the demonstration sites. Second, attendees heard first-hand about effective strategies and practices, as well as some the challenges in the four demonstration sites.

The institute Directors, Fellows, Seminar Leaders, and other institute representatives who attended these meetings typically gave them high marks as sources of information and credibility for the institutes. In this vein, it was important for district leaders, who might be new to local partnerships, to see leaders from other districts offering testimonials about the benefits of the institutes and discussing their commitments. Similarly, these sessions provided university faculty opportunities to hear from faculty members at other universities. Discussions of issues of common concern, such as increasing and sustaining the quality of curriculum units, strategies for marketing the institutes to potential funders, and the related concern about being able to demonstrate impact, helped sharpen the issues themselves and probably helped raise them to a higher level of importance than they might have had as concerns of individual institutes. Finally, the fact that these meetings were held at Yale added considerable cachet to the events.

In addition to these large national meetings with rather broad-based participation, the Yale-New Haven Teachers Institute convened meetings of institute Directors and meetings of leaders of the partner organizations. The Directors' meetings were occasions to plan other meetings and to discuss issues of common concern in implementation and the operation of the demonstration projects. The meetings with leaders of institutional partners also included the President of Yale. Based on comments from institute Directors who did not themselves attend these partner meetings, the meetings were occasions to build and affirm commitment to the teachers institutes and to providing the support necessary for them to continue operations. The meetings also provided opportunities to discuss the longer-term future of the institutes, particularly after the first four became stable programs in their districts. Several institute Directors reported that institutional leaders came away from these meetings with renewed interest and commitment to actively supporting the teachers institutes.

Again, based on interviews with institute Directors and Fellows, it does not appear that these national meetings resulted in much lateral communication among the institutes outside of the meetings themselves. Several Directors indicated that they had tried to communicate with other Directors, but that their efforts did not go very far. Similarly, there appeared no evidence of extended communications among Fellows and university faculty across the four institutes. There were, however, extensive communications between Yale and the individual institutes, which are discussed below. For these reasons it is probably more appropriate to characterize the relationship between the Yale-New Haven Teachers Institute and the demonstration sites as the hub and spokes of a wheel rather than as a network or league of teachers institutes. Alternatively, the number of meetings and the scope of the agenda seemed designed to set the stage for more active networking among the four demonstration sites, it is possible that the scheduled meetings and other communications offered sufficient interaction, and the sites did not see additional interactions as necessary or adding much value to their work. Interestingly, while the final reports from the institutes comment

on their working relationship with the Yale-New Haven Teachers Institute, they have much less to say about interactions with the other institutes outside of the various meetings.

One of the most important roles played by the Yale-New Haven Teachers Institute was that of monitor and critical friend. The monitoring role included establishing a reporting system that called on the demonstration projects to submit annual progress reports on key themes related to program design and progress in implementation. The projects were also required to report on expenditures. Together, these reports served several purposes. In them, the institutes described concrete examples of implementation and progress (e.g., the number and topics of seminars convened, enrollment, and the number of curriculum units produced). They also discussed local governance arrangements, particularly the evolution and challenges in the working relationships with institutional partners, and they reported their next steps. Requirements for final reports called on institutes to summarize their progress across the first three years of operations and to reflect on how they addressed each of the model's principles. These requirements also called for discussions of lessons learned, the impact of the institutes, and plans for the future.

The Yale-New Haven Teachers Institute reviewed these reports and provided feedback to the Directors. In several instances, it requested clarification of certain points and sought changes to correct inaccuracies in expenditure reports. Overall, the reports provided the Yale-New Haven Teachers Institute with important information related to implementation progress and challenges. This information could, in turn, help the Yale-New Haven Teachers Institute target problems and issues that needed additional attention from projects. From the perspective of the external evaluation, these reports represent valuable sources of information about important elements of institute operations and about institute Directors' perspectives on the challenges they faced and how they addressed them.

In addition to meetings and reporting requirements, the Yale-New Haven Teachers Institute complemented its stewardship of the national demonstration projects with annual visits to each of the sites by a teams of institute staff and Fellows from New Haven. During these visits, team members observed institute activities and met with Fellows and Seminar Leaders. These visits were also occasions for troubleshooting and problem-solving, and in some cases, for reminding local institute leaders of their commitments and encouraging them to meet them.

As is the case in similar projects which feature the leadership and guidance of an intermediary organization, the roles of leader, critical friend, and monitor do not always meld comfortably or easily. In these situations, tensions can arise early when there is, on the one hand, a well-defined program model which draws on long years of experience and, on the other, a desire to implement

and adapt the model in sites that are quite different from the original site—in this case the Yale University and New Haven Public Schools as they have evolved since the late 1970s and early 1980s.

Based on interviews with the Directors and others who were close to the institutes, the Yale-New Haven Teachers Institute's early perspective on working with demonstration sites may be characterized as pushing the sites to address the basic principles of the model to the point of being prescriptive. In retrospect, and to speculate, it may have been that one of the important sub-themes of the Yale-New Haven Teachers Institute's message to the demonstration sites was to work hard to implement the program model pretty much as it was implemented at the original site and, then, based on the lessons learned from early implementation, consider ways of adapting the model to more effectively meet local needs and circumstances. This approach probably increased early fidelity to the model as well as produced tensions at sites where leaders were already thinking about adjusting the model to suit local needs better.

Several examples, three of which were already discussed, illustrate the potential downside of deviating from key components of the model and undermining potential benefits that might otherwise be achieved. One example is ATI's decision to offer a very compacted seminar schedule (four weeks and multiple meetings each week), almost certainly limited opportunities for sustained study of seminar content and ongoing discussions between Seminar Leaders and Fellows. It also forced Fellows to select topics and prepare units without much time to explore the research base or to devote serious and sustained time to writing, feedback, and revision. This compact schedule could also undermine the norm of collegiality that is so important to the institute model.

Another example of a basic departure from the model was SATI's decision to expand the number of seminar offerings to ten in the third year of the demonstration program, which, strictly speaking, is not a deviation from the model, but rather a deviation from the demonstration program's guidance and expectations. In this site, where communications between the institute and SAUSD were already sparse, the unilateral decision to expand resulted in an initial SAUSD teacher enrollment of about 50 percent of the capacity of the institute's offering of ten seminars. Low initial enrollment was followed quickly by a decision to open the institute to teachers from nine other districts in the area as well as to faculty of a local community college. At a minimum, this change probably signaled a serious dilution, if not complete demise, of the working relationship between the university and SAUSD around the teachers institute. It probably also resulted in some confusion in seminars as SAUSD teachers were bound by SATI's arrangements for developing and being paid for curriculum units and others were not.

In the first instance, the Yale-New Haven Teachers Institute expressed concern about ATI's seminar schedule, but did not force a change. As the study

team understood the situation at SATI, the Director did not consult the Yale-New Haven Teachers Institute to explain the decision to expand, nor did she seek approval in advance. The two other experiments with seminar design discussed in an earlier section, at PTI and ATI, also point to the need for extensive communication about expectations and careful planning of seminar activities to ensure that everyone is on board and prepared to carry out their roles.

In the end, institute Directors and university faculty and administrators generally valued the advice and guidance that they received from the Yale-New Haven Teachers Institute. Fellows valued opportunities to meet with Fellows from other institutes and to discuss issues of common interest. And, with the possible exception of the annual meeting in October, 2001, which closely followed the tragedy of September 11, all of the participants welcomed an opportunity to visit Yale and New Haven.

Resources

Funding for the institutes came from grants provided as part of the national demonstration project and from local matches that were required as conditions of the initial grant awards. This section of the report looks at overall expenditures for the institutes and their experiences in meeting the local match requirements.

Annual Expenditures

Institute operations and activities generally required expenditures in the following areas:

- Salary for the institute Director as a full-time position
- Salaries for Seminar Leaders calculated at 1/9 of the base salary on each campus
- Salary for office support staff
- \$1,000 stipends for Fellows who completed all institute requirements, including the preparation of a curriculum unit
- \$750 stipends for teacher representatives (in addition to stipends for completing requirements)
- \$500 stipends for seminar coordinators (in addition to stipends for completing requirements)

- Travel for participation in national meetings of the Yale-New Haven Teachers Institute National Demonstration Project
- Costs associated with final formatting and dissemination of curriculum units and other activities to support the institutes (such as receptions, orientation sessions, and workshops)

Across the first three years of operations, institutes reported annual operating expenditures ranging from \$176,275 (at PTI in 1999) to \$256,681 (at ATI in 2001). (See Exhibit 4). The average of reported annual expenditures in this period was \$213,892. Most of the variations in annual expenditures were related to the number of seminars offered and the number of Fellows who completed all of the requirements and received stipends. There were some annual variations in faculty salaries. Across the four institutes and for each of the first three years, expenditures for institute staff and faculty salaries accounted for between just over half and two-thirds of the total. Stipends for Fellows who completed all of the institute requirements, Teacher Representatives, and Seminar Coordinators accounted for approximately a fifth to a third of each institute’s expenditures. Variations in these expenditures can be accounted for primarily by variations in the numbers of Fellows who completed curriculum units.

Exhibit 4
Annual Expenditures

	1999	2000	2001
Albuquerque	\$180,714	\$215,770	\$256,681
Houston	\$225,801	\$199,428	\$221,381
Pittsburgh	\$176,295	\$212,111	\$255,069
Santa Ana	\$208,322	\$225,084	\$190,615

Exhibit reads: In 1999, ATI’s annual expenditures totaled \$180,714.
Source: Teachers institutes’ annual financial statements, 1999-2001

Meeting the Local Match Requirements

One of the challenges that the institutes faced was meeting local match requirements, which increased from about 40 percent of their budgets in the first year to about two-thirds in the third year. There were two general possibilities for meeting local match requirements. One option was for institutional partners to contribute resources to institutes, and the other was for institutes to seek grant funds. Exhibit 5 displays the percentages of reported annual expenditures that were covered by funds from local partners, grant funds, and the national demonstration project.

Exhibit 5
Funding Sources for Teachers Institute for Expenditures

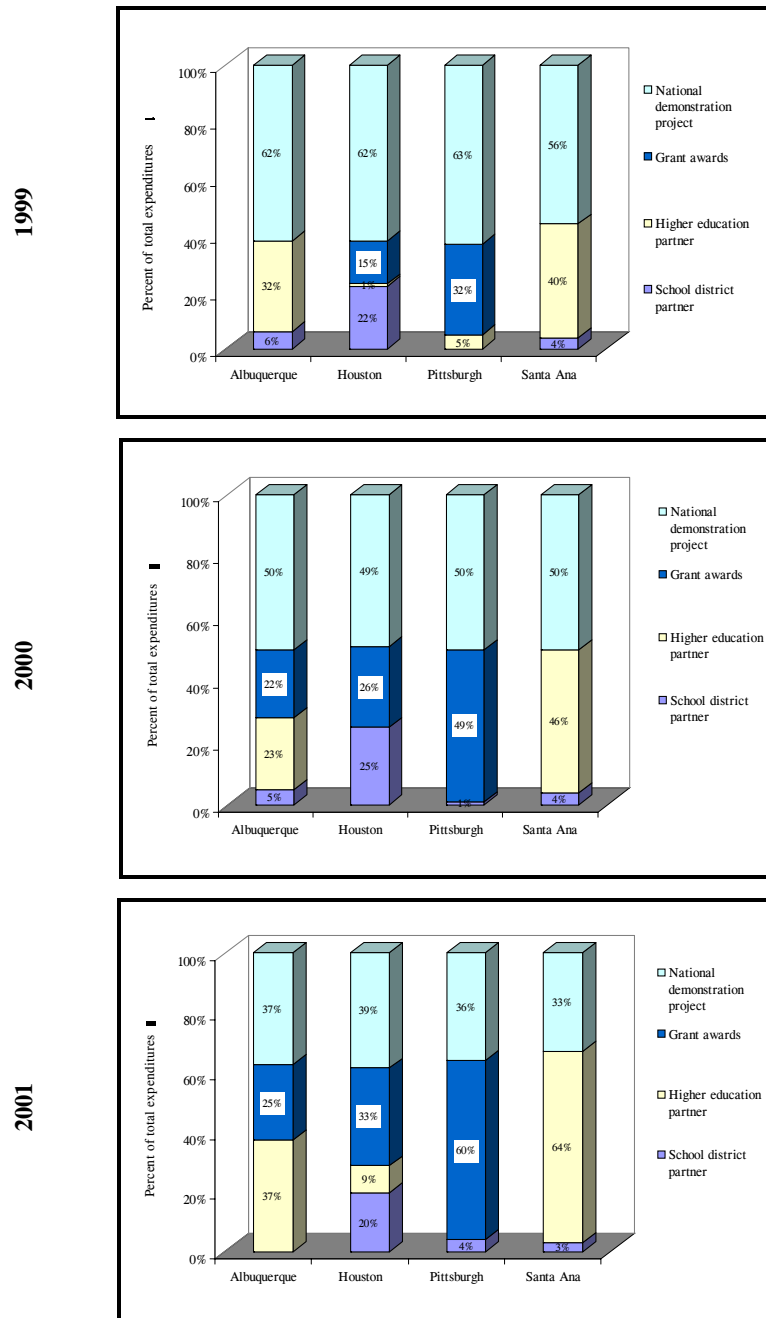


Exhibit reads: In 1999, six percent of the ATI's expenditures were covered by the school district.

Source: Teachers institutes' annual financial statements, 1999-2001

As the data in Exhibit 5 demonstrate, contributions from three of the four partner school districts covered six percent or less of the annual expenditures. In addition, PPS did not contribute any funds in 1999, and APS discontinued its contributions in 2001. In contrast, following a commitment by the then-Chief Academic Officer, who recognized the potential benefits of the program model at HTI, HISD provided \$50,000 a year to support the institute. This contribution

covered more than 20 percent of the institute's annual expenditures. Two of the four higher education partners made substantial contributions to institute operations. Funds from the University of New Mexico accounted for between just under a quarter and slightly more than a third of ATI's annual expenditures, and the University of California-Irvine, through the Center for Educational Partnerships, met all but a small portion of SATI's local match in each year of its operations. In 2001, UH agreed to provide HTI funds for the salary of its Director, which represented a significant contribution to the institute's basic operations.

The data in Exhibit 5 also suggest that three institutes had at least some success in garnering grant funds. Across the first three years, grant funds covered between a third and 60 percent of PTI's expenditures. Grant funds also accounted for increasingly large portions of the annual expenditures at HTI and ATI. Subsequent to the initial three-year funding period, PTI and HTI reported additional grant awards, including several awards from federal programs. In the grant proposals, the teachers institutes had been included as partners of the school districts.

Although university development officers helped institutes identify potential funders and develop proposals, institutes competed with other university or college programs that also sought funding. For example, an official at Chatham College explained that as the college mounted its own fundraising campaign, using its name to help raise funds for the teachers institute would, in effect, put the college in competition with itself among local funders. Development officers at UH noted that the teachers institute competed with more than a thousand other programs and projects for which external funding was needed and that early in the life of the institute it did not have a particularly high priority on this list. One implication of the situations just described was that institute Directors spent considerable time fundraising, and that, absent receiving several large grant awards, fundraising was an ongoing activity.

Early in the demonstration project, it was possible to market the institutes as new and exciting opportunities for teachers' professional learning. Later, after the institutes had been operating for several years, they could still lay claim to providing exciting professional learning opportunities for teachers. However, they also began to face questions about what they had accomplished. One answer was to point to the volumes of curriculum units that Fellows had developed. A second answer was to report the anecdotal evidence of renewed commitment to teaching learning and the inclusion and use of new materials in classroom instruction. Near the end of the demonstration project, the institutes began to take the challenge of systematically demonstrating their impact on teaching and, subsequently on student learning, much more seriously as a condition of funding. During the study team's first visit to PTI, a Pittsburgh school district official explained PPS's interest in this issue as follows:

In order to sustain this, the institute will have to answer the question of what is the added value [to the district]. The answer can't be "The teachers feel great, they love developing the curriculum units, they feel more professional..." We felt that was missing [at Yale], that the model focused on the individual needs of teachers instead of the overall impact on teaching and learning...The value to us is that teachers can go more deeply and richly into content...which will result in more rigorous teaching.

This comment describes one of the challenges that the institutes face in marketing themselves to potential funders. It may also, at least indirectly, explain why districts that encourage teacher professional development also make limited financial contributions to the teachers institutes.

A second challenge, and a strategy for meeting it, was suggested by a university administrator who thought it necessary for the institutes to somehow create an endowment to support basic operations and then to seek other funds, presumably grant funds, to support individual seminars. Her rationale was that if the institutes appeared stable and successful, they could relatively easily attract support from funders interested in particular disciplines.

Impact, Lessons Learned, and Prospects for the Future

The Yale-New Haven Teachers Institute National Demonstration Project set out to demonstrate that it is possible to replicate the teachers institute model in a relatively short period of time in four sites that are considerably larger than New Haven. The demonstration project succeeded in reaching its goal. All four of the sites established teachers institutes that offered three sets of seminars on a broad range of topics and issues. A large majority of the Fellows who enrolled in these seminars also developed curriculum units for use in their classrooms and by colleagues in their districts and elsewhere.

After the end of the initial three-year period of the National Demonstration Project, and with encouragement and support from the Yale-New Haven Teachers Institute, three sites, ATI, HTI, and PTI, continued to operate in 2002, and 2003. In 2002, both PTI and ATI experimented with alternatives to the basic approach to the seminars model. The fourth site, SATI, effectively ceased operations as a teachers institute in the mold of the Yale-New Haven Teachers Institute. Subsequently, the ATI ceased to operate as a teachers institute.

Early Impact of the Teachers Institutes

The evaluation found clear evidence of important accomplishments, reflected in the number of seminars provided in the institutes, the number of Fellows who participated in these seminars, and the number of curriculum units the Fellows produced. In addition, based on reports from the Fellows, almost all used their curriculum units in one way or another and were pleased with the experience. Large majorities of Fellows were unequivocal in saying that their experience in the institutes, especially the preparation of a curriculum unit, gave them a real sense of accomplishment and re-kindled their excitement about learning. As one Fellow put it: “To be teachers, we must also be learners.” When asked in interviews to compare their experience in the institutes with their experience in other kinds of professional development, teachers agreed that the institutes are vastly superior. They appreciated the intellectual stimulation, and the opportunities to develop curriculum units, and they appreciated that they were respected as professionals.

For their part, Seminar Leaders reported increased understanding and appreciation of public education and the work that teachers do. Some also said that their experience as Seminar Leaders led them to re-think their approach to teaching graduate and undergraduate courses.

At the end of the demonstration project, the important unanswered question was whether these positive benefits to individual teachers and faculty members would persist and be reflected in longer-term changes in professional practice and improvements in student learning. It is reasonable to speculate that teachers’ continued use of and reflection on rigorous curriculum units could result in ongoing development and experimentation with new curriculum materials and instructional strategies. The best teachers can and do engage in these kinds of activities on their own. Others require considerable support and encouragement from colleagues and school leaders. Continued or even increased use of the curriculum units, particularly if the use is well-documented, could result in the institutes being seen as valuable resources for schools and districts.

What about the institutes as models for other professional development programs and activities? District leaders in Houston and Pittsburgh respect the program model, but at the end of the demonstration project it was too soon to judge whether the experiences, structures, and perspectives of the institutes are being emulated elsewhere in the districts. As a model of professional development, many institute seminars get solid marks for their focus on content, although the content was not always closely or explicitly aligned with school curricula. The preparation of the curriculum units holds the possibility of linking the study of content with specific pedagogical strategies for helping students master the content. The seminars also get solid marks for providing teachers with relatively long-term opportunities for study and interactions with colleagues and

seminar leaders. Interactions between Seminar Leaders and Fellows are opportunities for feedback on the mastery of new content.

Despite these strengths, institutes, particularly the seminars, as models of professional development fall short in several important ways. First, the model does not balance attention to feedback on the units as curriculum and feedback on the quality of sample lesson with the attention given to reviewing the intellectual quality of the essays. Here it is important to recall that one of the principles of the model is that that Fellows are the experts on pedagogy and the Seminar Leaders are the content experts. A second difficulty with the model is that it does not include opportunities for practice and feedback on the classroom applications of the curriculum units. There is, in effect, no follow up. Therefore, teachers are left on their own to determine whether the units worked out as intended and to figure out ways to make them work better.

Finally, in terms of the impact on student learning, it will be incumbent on the institutes and their supporters to find ways of documenting whether and how the curriculum units and related changes in teaching contribute to student learning. Teachers reported spikes in student enthusiasm over the new content included in the curriculum units, but had much less to say about what students actually learned. The implementation and use of the curriculum units here and there in instruction programs will little or no discernable impact on student outcomes as they are reflected in state and local assessments. Use of the more ambitious units could affect student scores on end-of-course assessments if the units are explicitly aligned with the assessment. A more reasonable place to look for evidence of impact of the units is in samples of student work that are produced as responses to assignments included as part of the unit lessons. Systematic review of these work samples could provide solid evidence of impact on student learning.

Lessons from the National Demonstration Project

The hard work and experience of the four sites and the Yale-New Haven Teachers Institute during the National Demonstration Project, and of the sites that continued to offer institutes after the initial three-year period of the demonstration project had ended, yield important lessons about starting and sustaining a program of professional development that is substantially different from most other teacher professional development in school districts across the country.

Lesson 1: Communicate early and often with key audiences and stakeholders. Perhaps the most important lesson learned from the demonstration project is the importance of communication. In this case, the model of professional development, the expectations for the roles and relationships between teachers and university faculty, and the expectations for curriculum units were all unfamiliar to key players in each of the sites. Early tensions and frustrations

around these issues were often the result of incomplete understanding of the model. Sessions at the Yale-New Haven Teachers Institute before and after the institutes began helped explain the model's expectations and underlying assumptions. The sessions were able to draw on current practice in New Haven as well as 25 years of experience in creating and sustaining the original teachers institute.

In addition, institute Directors learned that they needed to more aggressively help institute Fellows, Seminar Leaders, and key stakeholders understand the model. Institute Fellows and Seminar Leaders wanted more extensive information and guidance about the curriculum units, and Seminar Leaders wanted help in understanding the delicate balance between "leading" a seminar and acting as a colleague and peer to teachers. The institutes responded by developing increasingly detailed written guidance and sponsoring special workshops to help Fellows develop their units. In addition to helping the institutes operate more smoothly, the increased communications helped inform both teacher and faculty decisions to participate in the institute.

As noted above, several of the Directors pointed out in their final narrative reports that there is a premium on more extensive communication with district leaders and principals. District leaders need to be apprised of the potential benefits of the institutes as well as what is necessary to support them. The Directors suggested that communication with principals is important because principals can encourage and support teacher participation in the institutes.

In addition to communicating about the model itself, the Yale-New Haven Teachers Institute played a second, invaluable role in communications. Leaders from this institute, including teacher leaders, worked hard to establish a network among the four demonstration sites. The national meetings were forums for the sites to showcase their progress, surface issues of common interest and concern, and discuss solutions to problems. Visits to individual sites were occasions to offer advice and assistance and to communicate about the importance of the institutes to the partner organizations. These various communication efforts were critical to the demonstration project and it is unlikely that the four sites would have made the progress they did without it.

Finally, it is important to recognize and anticipate that effective communications require considerable time and energy as well as sound communication skills. For example, the ongoing development of program materials reflects increasingly sophisticated understanding of the program model, and also increased sophistication in communicating about the model. These improved communications will facilitate understanding of the program and, perhaps more important, help Fellows and Seminar Leaders be more effective in their roles and contributions.

Lesson 2: Insist on the model. One way of characterizing the Yale-New Haven Teachers Institute approach to working with the four demonstration sites is that the leaders from this institute consistently insisted on the model. This is not to suggest that they opposed local adaptations, but that they paid particular attention to key features of the program such as institutional leadership, teacher leadership in decision making, the role of faculty as Seminar Leaders, the preparation of curriculum units as serious intellectual work, and the allocation of adequate resources. In HTI and PTI, this insistence paid off, as the Directors and others worked hard to adhere to the model. At SATI, rapid and unplanned expansion of the institute to additional districts and a community college and inadequate communications with SAUSD about key elements of SATI resulted in its demise. In 2003, ATI had shrunk to two seminars and the Director was actively reviewing other options for providing professional development, none of which approach the depth and intensity of the seminars in the program model.

Lesson 3: Hire strong leaders. Although this lesson is a basic axiom of effective organizations, it is particularly important in this case. Leadership of a teachers institute requires understanding and commitment to the program model as well as the skills to communicate about the model. Effective leadership also requires the ability to work effectively in two kinds of organizations—universities and school districts, and to ensure that, together, these organizations provide a supportive environment for a teachers institute. Effective leaders must also be successful fundraisers.

Lesson 4: Start small, grow slowly. By initially targeting approximately 20 schools in each of the partner districts and offering 4-6 seminars with about 12 Fellows each, the institutes did not need to establish large organizational structures. Their communications and other operations generally remained at a manageable scale. As the demonstration program progressed, the number of seminars they offered grew slightly, but in their final reports none of the institutes indicated that it aspired to substantially increase in size. It is easy to see how the institutes could become unwieldy if they attempted to offer many more seminars and serve more teachers at any one time. Basic operation supports would need to be scaled up accordingly and efforts to maintain quality could become diluted.

A serious downside of starting small and growing slowly, particularly in larger districts, is that an institute can reach only a small fraction of teachers and, despite the Directors' and Fellows' best efforts, achieve only modest visibility. Further, district leaders may see it as adding only limited value to comprehensive or district wide professional development initiatives. Unfortunately, this problem may be unavoidable, given the urgency of sweeping reform initiatives, particularly those associated with the introduction of new standards and high-stakes assessment systems and others associated with compliance with the provisions of the *No Child Left Behind Act*.

The practice in many professional development programs is to attempt to grow rapidly and to serve as many participants as possible, particularly in response to the perceived pressures of sweeping reform movements. Interviews and the final reports from the institutes suggest that Directors of the institutes are wary of rapid and large scale-up. They fear a dilution of the model and worry about the capacity of expanding to provide the necessary supports to larger numbers of teachers. In the end, they prefer to remain at about their current size and serve approximately 80–100 teachers a year.

Lesson 5: Focus on outcomes. In an era of increased accountability for both students and teachers and increased concerns about teacher quality as reflected in the provisions of the *No Child Left Behind Act*, it will be incumbent on institutes to demonstrate their impact on teachers and, to the extent possible, on student learning. Both school districts and external funders will want to know more about the potential for returns on their investments in the institutes. The institute Directors and others recognized this need and the challenge associated with meeting it.

Documenting the use of curriculum units through peer observations or individual logs could demonstrate the impact of the units in improving instruction. Similarly, the inclusion of solid lesson plans with clear statements of expected student learning outcomes will also help, as will documenting student work produced as a result of a curriculum unit.

A caveat to focusing on outcomes is that outcomes take time to achieve. For example, curriculum units developed in the spring will almost certainly not be used until the following fall at the earliest and they may not fit into the instructional schedule until later in the year. Hence, it is not reasonable to expect outcomes for several months, or perhaps even longer. As a development strategy, it may make sense to anticipate the need to collect data about outcomes and build these activities into plans for continued operation of the institutes or into plans for new ones.

Lesson 6: Address local goals and priorities. The institutes' increased attention to the explicit alignment of curriculum units with standards is an important step toward demonstrating support for district goals and priorities. It may also be appropriate to consider closer alignment of seminar content with district curricula and content standards. This will almost certainly require additional planning and perhaps even some compromises between the institutes and school districts. Finally, addressing local goals and priorities probably means addressing them explicitly in the early design phase of a teachers institute. This does not necessarily mean negotiating compromises on the basic principles of the institute model, but it does entail clearly articulating the benefits of the model in addressing and meeting local needs and priorities, particularly priorities associated with improved instruction and increased student learning. The experiences of the two experiments also suggest that closer coordination with

districts will, at a minimum require careful planning and ensuring that there is both understanding and consensus about institute activities, the rationale for them, and the expectations for both Seminar Leaders and Fellows.

A final and very important lesson from the national demonstration project is that it is important to provide a variety of leadership and technical assistance to help new institutes get started and mature. The Yale-New Haven Teachers Institute provided invaluable support, assistance, and encouragement to the four demonstration sites, and it is unlikely that they would have survived without it. The leadership of the Yale-New Haven Teachers Institute could draw on extensive experience to explain various features of the institutes and the rationale behind them. The system of national meetings, site visits, and annual reports created for the demonstration project provided both a forum for participants and vehicles for the Yale-New Haven Teachers Institute to communicate progress and guidance. The core vision of the teachers institutes, particularly the emphases on collegiality and teacher leadership, is not complicated, but it does represent a substantial departure from most teacher professional development and most university courses. For this reason, new sites need constant reminders, guidance, and prodding to stay the course, at least long enough to determine for themselves that the model yields the benefits that it promises. The Yale-New Haven Teachers Institute provided these things and more during the course of the demonstration project. In the future, this support can be augmented by the experiences and insights of other teachers institutes, particularly those of PTI and HTI.

Prospects for Sustainability

The experiences in HTI and PTI and to a lesser extent ATI clearly suggest that the institutes can be sustained. These institutes garnered operating funds after the initial funding period of the national demonstration project ended. They offered full slates of seminars in 2002 and boasted high enrollments and high rates of completion of curriculum units. The improvement in the rate of completion of the curriculum units was especially significant in HTI. The HTI and PTI have established and maintained positive working relationships with partner school districts and operate on solid footing with partner institutions of higher education. The ATI appears to rest on a reasonably strong foundation at UNM, but at the end of the demonstration project had not established a good working relationship with APS.

At the same time, challenges loom. Funding remains an issue. Institutional partners in Houston have made substantial contributions to HTI, but it will continue to be necessary to seek additional funding if the institute is to continue operating at its current level or expand its operations to include a few more seminars or add other districts in the Houston area. At the end of the demonstration period, PTI could not rely on support from its institutional partners,

so it was under continuing pressure to seek grant funds from the local philanthropic community or other sources, including state and federal grant programs. However, grant funding is uncertain and typically will not cover long-term operating costs. Sustaining PTI, in particular, may depend to some extent on the institute's capacity to demonstrate its value to the district in terms of the preparation of district-approved curriculum materials that can be widely disseminated and used.

Scale and capacity also represent a challenge. The teachers institutes do not have—or aspire to have—the capacity to serve more than a small fraction of the teachers in a district at a single time. Ongoing annual cycles of seminars certainly increase the numbers of teachers who can benefit from the kinds of professional learning experiences provided by the institutes, but achieving any sort of a discernable critical mass will require time, patience, and ongoing investments of resources—all three of which are in short supply. Rather than expand, the institutes could more actively seek ways to contribute to the districts. As several of the final reports on institute activities suggest, Directors and Fellows have begun to explore participation in local conferences and other professional development activities that can involve Fellows in leadership roles. These and other kinds of activities are not likely to place undue burdens on the institutes and they have the benefit of communicating about institute products and its model of professional learning.

In the end, the teachers institute model will not necessarily find a congenial home in all districts and in all institutions of higher education. Congenial environments probably include those in which there is some history of a working relationship between the district and the university, particularly with the colleges of arts and sciences. This is not suggest that a teachers institute cannot be the linchpin of such a partnership, but the opportunity costs of developing a new relationship may outweigh the benefits. Congenial environments are also likely to be those in which the university, particularly the college of arts and sciences, actively reaches out to the K-12 system to work with the system, especially teachers, to design and implement challenging professional learning opportunities that build on the talents and interests of both partners. In addition, a new institute is likely to flourish in a school district that respects teachers as leaders and offers serious opportunities for them to assume meaningful leadership roles without going far from the classroom. Finally, an institute is likely to flourish in a district that values teachers' professional learning and recognizes that the content and process of professional development should be informed by teachers' needs and interests as teachers define them as well as district priorities. As the experience of the national demonstration project shows, teachers institutes can and do build on teacher learning needs defined by teachers, and they model both intellectual rigor and collegiality in professional learning.

APPENDIX: BASIC PRINCIPLES

The following principles, fundamental to the approach that has been developed by the Yale-New Haven Teachers Institute, are quoted with slight condensation from the Request for Proposals for Implementation Grants. They are included here because they are the guiding principles for each of the four new Teachers Institutes. Although listed as separate principles, they are interrelated elements of an organically unified approach.

(1) The new institute links an institution or institutions of higher education to a school district (or districts) in which a significant proportion of the students come from low-income communities. It offers a distinctive plan for an adaptation of the Institute's approach, addressing an educational problem that may be appropriately addressed by that approach. The size, scope, and emphasis of the adaptation depend upon the needs of the district(s), the educational resources available, and the expected funding.

(2) A continuing, full-time director (or, if approved, two half-time directors) provided by the Institute serves as convenor, administrator, liaison between the district(s) and the administration and faculty of the institution(s) of higher education, and fund-raiser. The director reports to the chief officers of the institution(s) and the district(s), and is able to recruit faculty from various parts of the institution(s) of higher education.

(3) The Institute is led in crucial respects by teachers in the district(s), who play a major and indispensable role in the planning, organization, conduct, and evaluation of the programs intended to benefit them and, through them, their students. They are involved in initiating and approving decisions with respect to seminars offered, within the scope determined as feasible and appropriate by university and school district administrators and the director. The seminars are special offerings designed to address the Fellows' interests and needs for further preparation and curriculum development. The Fellows are not students in university courses. Rather, they are considered full members of the university community during the year in which they are taking a seminar.

(4) There is a pool of teachers in the schools prepared to play a leading role in planning, organizing, sustaining, and evaluating the new Institute. They are responsible for recruiting other teachers into the program. There is also a pool of faculty members from the liberal arts and/or sciences in the institution(s) of higher education who teach at the undergraduate and/or graduate levels and who are prepared to lead seminars, advise in the shaping of curriculum, and endorse the curriculum offered by the

Institute. If faculty members from departments, schools, or colleges of Education are involved in the Institute's program, they should indicate their readiness to lead seminars that focus primarily upon "content" rather than "pedagogy." All teacher-leaders and university faculty members should understand the distinctive nature of such collaborative work and should be eager and willing to participate in it.

(5) Policies within the school district(s) pertaining to curriculum and professional development (as established by the state, the school board, the union, or specific administrators) must be conducive to the development of the Institute, or at least not incompatible with it.

(6) The curriculum will consist of intensive long-term seminars in several disciplines on broadly defined topics (meeting over a period of months) in which the seminar leader and the Fellows will study and discuss certain common texts, objects, or places and each Fellow will prepare a substantial "curriculum unit" that he or she intends to employ in the classroom during the following year. This curriculum unit will consist of an essay on the material to be presented in the classroom and the pedagogical strategies to be employed, followed by several lesson plans, which are examples of those to be used by the teacher, and an annotated bibliography. The curriculum units may bear a variety of relationships to the general topic of the seminar, appropriate to the grade-level and the aims of the teacher. They will have immediate application in the classroom, and they will be consistent with the curricular guidelines provided by district or school that are to be followed by the teacher.

(7) Participating teachers from the institution(s) of higher education and the schools are considered professional colleagues working within a collegial relationship. Seminar leaders and Fellows understand that all participants bring to the seminar important strengths, both experience and knowledge, with respect to the seminar topic and/or its potential relevance to the classroom.

(8) Although the seminar leaders are primarily responsible for presenting to the seminar the "content" or "knowledge" of one or more disciplines, the seminar itself will at appropriate points involve consideration both of that content and of the procedures necessary to present it in the classroom. That consideration, to which the Fellows will bring their own experience, is important in establishing the collegiality in the seminar.

(9) To strengthen teaching and learning throughout the schools, the new Institute must involve a significant proportion of all teachers within its designated scope and must therefore actively recruit

teachers who have not participated before. The Institute must have a rationale for the designated scope and make clear how it will involve a significant proportion of the teachers within that scope.

(10) Within its designated scope, the Institute encourages any teacher to apply who has a teaching assignment relevant to a seminar topic, can present a proposal for a curriculum unit relevant to that topic, and will be assigned to teach a course in which that unit can be used.

It makes every effort to ensure that the pool of teachers applying to the Institute represents a cross-section of all eligible teachers. Its program should attract teachers regardless of age, ethnicity, gender, academic background, professional experience, and length of time in teaching.

(11) In order to recognize the intensive, demanding, and professionally significant nature of their participation in the seminars, the seminar leaders will be provided with some remuneration, and the Fellows, who participate on a voluntary basis, will be provided with some appropriate honorarium and/or stipend. This honorarium or stipend for participating school teachers is not salary or wages and is therefore not to be viewed as subject to any conditions of employment.

(12) The institutional and district administrations are committed to a continuing collaboration with each other during the Grant period on the basis of this plan and also to its extension beyond the Grant period.

(13) There will be ongoing financial support from both the institution(s) of higher education and the school district(s). They are committed to provide or seek necessary supplementary funding for the duration of the Grant, and have plans to seek entire funding thereafter.

(14) Because each new Institute is a “demonstration site,” making clear the advantages and difficulties of adapting the Institute approach to another situation, there will be an explicit and visible relation between the new Institutes and the Yale-New Haven Teachers Institute.

(15) Each new Institute is committed to communicating with the Yale-New Haven Teachers institute and with the other new Institutes, and to disseminating their experience of the adaptation in various ways to other potential and actual Institutes across the nation. The means of communication may include personal visits, e-mail, news groups, online chats, text-based forums, etc., and will also include written accounts by the new Institutes for publication in On Common Ground.

(16) The new Institutes are committed to undertaking at their own cost, in cooperation with the Yale-New Haven Teachers Institute, an annual review of the progress of the project. They assume responsibility for their continuing self-evaluation, in cooperation with the Yale-New Haven Teachers Institute. They will provide the staff, the Implementation Team of New Haven colleagues, and other documenters that may be sent by that Institute and by the DeWitt Wallace-Reader's Digest Fund with full access to their activities and their documentation, including school and university personnel and sites. Each new Institute should anticipate the possibility that significant failure to reach stated goals of the demonstration, or to maintain it in accordance with the conditions agreed upon, could result in the termination of the funding. Each new Institute will submit annual reports to the Yale-New Haven Teachers Institute that provide:

- a systematic description of the new Institute and its activities, including ways that it has adapted the New Haven approach, the process by which it was established, how that process has unfolded overtime, and the progress made toward the goals of the demonstration;
- evidence that the new Institute is faithful to each of the basic principles of the New Haven approach;
- indication of the incentives at the new Institute for university faculty members and school teachers to participate;
- the cost of operating the Institute, set forth in detail as specified in the financial reporting requirements; a documentation of other funds allocated to the Institute; and the availability of long-term funding sources;
- an analysis of data on the participation of teachers in Institute activities;
- a summary description of the curriculum units developed by participating teachers, with information about the teachers' use of the Units and any other outcomes of their participation;
- an account of the assistance from the Yale-New Haven Teachers Institute that was needed, obtained, and used;
- a description of the relationship between participating teachers and university faculty;
- an analysis of the factors contributing to, and hindering, the success of the new Institute;

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

Using surveys and other instruments developed by the Yale-New Haven Teachers Institute, each new Institute will document: the number of teachers who apply; the representativeness of those teachers vis-à-vis the entire pool of teachers eligible to participate; teachers' and faculty members' assessments of the new Institute; and the classroom use to which teachers put the curriculum units. The new Institutes will work with the Yale-New Haven Teachers Institute to make whatever changes in the instruments may be needed to adapt them so that the results will be comparable across the different demonstration sites.

The Evaluation

In 2000, the Funds contracted with Policy Studies Associates (PSA) to conduct an external evaluation of the National Demonstration Project. The purposes of the external evaluation are to trace the evolution and development of the teachers institutes and analyze the implications for the sustainability and scale-up of teachers institutes. Data for the evaluation come from three rounds of site visits to each of the four demonstration projects, review of documents provided by the four projects as well as by the Yale-New Haven Teachers Institute, and a series of telephone interviews with Fellows who participated in the first two sets of seminars. In addition, the Yale-New Haven Teachers Institute shared data collected from surveys administered by each of the institutes at the end of each of the first three rounds of seminars.

Members of the study team visited each of the four sites annually, beginning in 2000, which was the second year of operations in each site. The 2002 visits occurred after the original funding period was over and permitted the study team to explore issues related to sustainability.⁹ Visits were scheduled in the spring to coincide with seminar schedules, which, in turn, facilitated access to Fellows and Seminar Leaders and permitted observations of seminar activities. Visits typically included interviews with Fellows, either individually or in groups, interviews with Seminar Leaders, interviews with institute Directors, interviews with representatives of the partner organizations, and, in some cases, interviews with funders. The first round of visits focused on the organization of the four teachers institutes; the second round focused on teacher leadership and the continued evolution and development of the institutes; and the third round focused on sustainability, the early impact of the institutes, and issues related to the preparation of the curriculum units.

⁹ The study team did not visit the SATI in 2002 because this site had effectively ceased offering seminars.

This data collection schedule permitted the study team to meet with all or almost all of the Seminar Leaders and, depending on their availability, representatives of partner organizations, including school district staff and university administrators who were knowledgeable about the institutes. In addition, the team interviewed principals who were identified as being familiar with the institutes and, in several instances, principals of schools in which a number of teachers had participated in institute activities.

As just noted, this schedule also made it possible to observe some of the ongoing seminars. Typically, members of the study team were able to interview several groups of teachers, usually just before or just after seminar sessions. These interviews included between 6 and 10 teachers and lasted about an hour. Because the team was interested in talking with teachers who had assumed leadership roles, these teachers were not always typical of all teachers who participated in the institutes. By and large, these interviews did not provide good opportunities to discuss the use of curriculum units in classrooms because most teachers had not yet completed the units. To be sure, some teachers commented on curriculum units they had completed in earlier rounds of seminars, but overall interview data from site visits are somewhat limited in this regard. Similarly, schedules did not permit the study team to observe the curriculum units being used in classrooms. To supplement site-based data collection, the study team conducted telephone interviews with a sample of 92 teachers who had participated in seminars in 1999 and 2000 and who had completed curriculum units.