



YALE NATIONAL INITIATIVE
to strengthen teaching in public schools®

Teachers Institutes Implement Recommendations for High-Quality Professional Development for all Teachers

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In a Research and Policy Brief, the National Comprehensive Center for Teacher Quality offers advice for school officials on how to select effective teacher professional development.¹ The Brief “addresses the aspect of the teacher support system that is perhaps the most important and weakly implemented: teacher learning and development.... Given the dire state of the economy,” the Brief advises state and district leaders on selecting “professional learning activities that are worth the allocation of scarce resources.”²

The Center recommends that school officials look for five research-based features of quality professional development to find programs that are “delivered in a way that yields direct impact on teacher practice,” as teachers need to “learn new ways to personalize their instruction” to “an increasingly diverse student population.” Furthermore, “teacher practice designated for change must clearly relate to student learning so that professional development will result in more students learning the content at higher levels.”³ Teachers Institutes address these needs in low-income communities with significant ethnic and racial diversity by helping teachers motivate students to learn rigorous content at higher levels.

Specifically, Teachers Institutes that follow the approach defined in the Understandings and Procedures of the Yale National Initiative to strengthen teaching in public schools implement the Center’s recommendations in these ways.

Recommendation of the National Comprehensive Center for Teacher Quality

“Alignment with school goals, state and district standards and assessments, and other professional learning activities including formative teacher evaluation.”⁴

How a Teachers Institute Helps a School District Implement the Recommendation

“Policies within the school district(s) pertaining to curriculum and professional development (as established by the state, the school board, the union, and specific administrators) must encourage the development of...[a Teachers] Institute” (Article 1 of the Understandings and Procedures Necessary for a Teachers Institute).⁵ “Each applicant’s principal must verify that the teacher’s participation in the seminar is appropriate, and that the proposed curriculum unit is related to, and significant for, the school curriculum, the district standards, and a course that the teacher will be assigned in the following school year. The curriculum units, which will have an immediate application in the classroom, may bear a variety of relations to the general topic of the seminar, appropriate to the grade level and the aims of the teacher and to the school plans and district standards” (Article 6).⁶ In beginning to plan a Teachers Institute, a school district submits a Planning Application that describes “relevant policies and the existing professional development programs, explaining how they will relate to the new Institute and how the new Institute will support district goals.”⁷

Recommendation of the National Comprehensive Center for Teacher Quality

“Focus on core content and modeling of teaching strategies for the content.”⁸

How a Teachers Institute Helps a School District Implement the Recommendation

“A Teachers Institute places equal emphasis on teachers increasing their knowledge of a subject and on their developing teaching strategies that will be effective with their students. ... The simultaneous consideration of subject matter and pedagogical procedures is fundamental to the Institute approach” (Articles 6, 7, and 8).⁹

Recommendation of the National Comprehensive Center for Teacher Quality

“Inclusion of opportunities for active learning of new teaching strategies.”

How a Teachers Institute Helps a School District Implement the Recommendation

“The Fellows, individually and collectively, will be responsible for bringing to the seminar at appropriate points the pedagogical procedures necessary for encouraging active learners in their elementary or secondary classrooms to acquire this knowledge” (Article 8).¹⁰ “Teachers are active learners in [Institute] seminars, receiving feedback from their peers and often trying out the units with their students as they prepare them.”¹¹

Recommendation of the National Comprehensive Center for Teacher Quality

“Provision of opportunities for collaboration among teachers.”

How a Teachers Institute Helps a School District Implement the Recommendation

Institute “seminars are both collaborative and collegial” (Article 6).¹² In surveys, Institute participants report the benefit of Institute seminars to “the development of teacher collaborations and teacher networks, as teachers gain knowledge of who their fellow teachers in others subjects, at other grade levels, and in other schools are, and what they are doing in their classrooms.”¹³

Recommendation of the National Comprehensive Center for Teacher Quality

Extended duration: Research documents the statistically significant advantage of professional development between 30 and 100 hours in length.¹⁴

How a Teachers Institute Helps a School District Implement the Recommendation

“The course of study consists of intensive seminars (not lectures) of relatively small enrollment...which meet over a period of no less than three months” (Article 6).¹⁵

Institute “seminars are of substantial duration, involving a minimum of 26 hours in session, while [teachers] also meet with seminar leaders, research seminar topics, and write their units over many more hours.”¹⁶ On average, Institute participants thus spend many more than 26 hours in seminars and individual meetings and in research and writing their curriculum units in stages over time.

Recommendation of the National Comprehensive Center for Teacher Quality

Emphasis on “teacher buy-in.”¹⁷

How a Teachers Institute Helps a School District Implement the Recommendation

“The Institute is led in crucial respects by participating 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 responsible for persuading other teachers to understand the Institute as having been designed to strengthen teaching and learning throughout the schools and to have a significant impact upon the school district” (Article 4).¹⁸

“The bleak consensus of researchers and teachers is that many existing forms are cursory, dreary exercises that leave teachers bored and resentful, not informed or inspired.”¹⁹
“With great uniformity, Fellows describe their Institute experiences enthusiastically. They credit the Institute with enhancing their interest in the subjects they teach, increasing their engagement with teaching, and augmenting their senses of autonomy in their classrooms. They are unfailingly positive about the benefits to them of participation in the seminars and about the experience of having prepared their curriculum units. Such consistency of responses is manifest not only among each year’s Fellows, but among Fellows across years. This consistency of findings was entirely unexpected. The teachers who have been Fellows of the Institute are a heterogeneous group.”²⁰

In written evaluations, teachers consistently rate Institute seminars as the best professional development they have ever had. A retrospective study of their annual evaluations showed that 96 percent of participating teachers found Institute seminars as “moderately” or “greatly” useful.²¹

Recommendation of the National Comprehensive Center for Teacher Quality

“The current economic climate has reduced the discretionary resources that states, districts, and schools have at their disposal. Budget cuts have become the norm, dampening the availability of funds and hindering efforts to enhance classroom practice through content-focused, long-term, job-embedded professional development.”²² In the current economic climate, it is more important than ever that districts select professional development activities that are both programmatically effective and cost-efficient.

How a Teachers Institute Helps a School District Implement the Recommendation

Institutes are cost-effective investments that become even more efficient over time. Because the number of students each Institute reaches grows exponentially over time, a continuing program becomes increasingly more cost-effective.²³ The longer an Institute operates – and the better it helps retain its participants in teaching – the more the districts’ capacity and the number of students reached each year are enlarged.²⁴ “The Institute approach does embrace the alternative of ‘higher quality activities for fewer teachers.’ Each Institute offers seminars for roughly 50 to 80 teachers per year. But through dissemination of their units, Institute can impact far more teachers than they enroll; and over time, significant percentages of teachers in particular schools and regions can be direct participants.”²⁵ (Article 13)

Recommendation of the National Comprehensive Center for Teacher Quality

The Center recommends that professional development be rigorously evaluated in spite of the difficulties that researchers continue to face in demonstrating the efficacy of such programs. There are numerous recognized research issues that are endemic to the study of professional development as a school intervention that impede positive correlations of effectiveness.²⁶ Still, the need for evaluations of professional development interventions that increase teacher knowledge (both pedagogical and content-based) is real and recognized by the field.

How a Teachers Institute Helps a School District Implement the Recommendation

“The Teachers Institute approach was developed more than 30 years ago, but it remains a state-of-the-art program. [Its] theory of change is grounded in the founders’ vision for the program, affirmed by participating teachers’ reports about their experiences and the benefits of participating, and backed by research and experts’ current understanding of best practices.

“Outcomes research conducted by the Yale-New Haven Teachers Institute and the Yale National Initiative shows that participating teachers consistently rate their Institute experience as valuable and report experiencing key intermediate outcomes. Annual surveys have consistently shown that participating teachers rate the Institute programs higher than other professional development programs in developing knowledge, skills, enthusiasm, high expectations of students, and capacities to motivate students. ...

“Strong causal research on the effectiveness of teacher professional development is still limited, but it provides evidence that teacher professional development can improve the intermediate and longer-term outcomes that the Teachers Institutes are designed to influence, especially when the professional development has features of the Teachers Institutes. Other correlational research also suggests that teacher professional development can improve intermediate and longer-term outcomes. ...

“The Teachers Institute theory of change has a solid foundation in experience and research, but it is still a theory that needs more testing with research designed to assess the causal relationships in the theory. Evaluation of the Teachers Institute approach employing a strong causal research design to explore the pathways and measure the magnitude of Institute impacts on intermediate and longer-term outcomes is needed to confirm that the theory of change provides an accurate map from Institute participation to outcomes.

“Planning for a strong evaluation of the Teachers Institute approach is under way. The Yale-New Haven Teachers Institute is undertaking a major redesign of its Management Information System to better support program activities and to capture data needed for research and evaluation. To the extent possible, the new system will be designed to accommodate variations among local Teachers Institutes and support their operations, as well as promote the collection of consistent data across locations.

Evaluation design activities are also under way. In the coming year, the Yale National Initiative will work with local Teachers Institute staff to prioritize research questions and identify Institutes where a strong evaluation is feasible. Building on past work to identify evaluation design options, the Initiative will develop a detailed evaluation design, sample design, and data collection and analysis plan for producing strong evidence of the effectiveness of the Teachers Institute approach.”²⁷

Notes

¹ The National Comprehensive Center is a partnership of Learning Point Associates, an affiliate of the American Institutes for Research (AIR), together with the Educational Testing Service (ETS) and Vanderbilt University. The Center’s was established in 2005 under cooperative agreement with the U.S. Department of Education to provide technical assistance to states and school districts as they work to meet the teacher quality provisions of the No Child Left Behind Act.

² Sarah Archibald, Jane G. Coggshall, Andrew Croft, and Laura Goe, *High-Quality Professional Development for All Teachers: Effectively Allocating Resources* (Washington, D.C.: National Comprehensive Center for Teacher Quality, February 2011), 1. Available online at www.tqsource.org.

³ Archibald et al., *High-Quality Professional Development for All Teachers*, 3.

⁴ Archibald et al., *High-Quality Professional Development for All Teachers*, 3-4.

⁵ *The Teachers Institute Approach: A Manual Containing the Steps, Understandings, Procedures, and Timeline for Establishing and Maintaining a Teachers Institute* (New Haven: Yale-New Haven Teachers Institute, 2007), 17-18. Each Teachers Institute is aligned with school reform goals and is designed to support a district’s strategic plan. School district superintendents in communities with Teachers Institutes attest to the ways that Institutes help them achieve the goals of their strategic plans. In Charlotte, the Teachers Institute supports district’s Strategic Staffing Initiative that works to place effective teachers in the lowest-performing, highest-need schools. The Superintendent, Chancellor, and President of the Charlotte-Mecklenburg Schools, the University of North Carolina at Charlotte, and Davidson College have written: “We believe in meaningful professional development for teachers as it builds their knowledge-base, encourages their creativity, helps retain them in our schools, and affects the ways in which our students learn and grow. The Charlotte Teachers Institute offers such professional development and thereby impacts our teachers, their students, and the Charlotte community. We will work together to ensure that the Charlotte Teachers Institute will be viewed as an important, permanent collaboration by those on our campuses and in our schools as well as the entire Charlotte Community.” North Carolina State Superintendent June Atkinson has explained, “North Carolina’s first-phase application to Race to the Top specifically highlights the importance of ‘Great Teachers and Leaders’ and the state’s commitment to ‘continuing to develop and refine university-LEA

partnerships to recruit, prepare, and support teachers for the specific needs of each LEA.’ The Charlotte Teachers Institute will help achieve this goal... The Teachers Institute model could serve as a model of best practice across the state that will help influence state policies and practices for teacher professional development.” In Philadelphia, former Superintendent Arlene C. Ackerman has written that “the Teachers Institute of Philadelphia program has worked to strengthen our participating teachers’ abilities to use and apply our Core Curriculum in their classrooms since its inception... The strong and innovative professional development offered by the Teachers Institute of Philadelphia and the Yale National Initiative plays a key role in our diverse efforts to increase overall teacher effectiveness.” In Pittsburgh, former Superintendent Mark Roosevelt described the benefits he felt his school district received from its Teachers Institute. “Pittsburgh Public Schools is a long-term partner of the Pittsburgh Teachers Institute for the following reasons: We know from research the importance of encouraging teacher professional growth through collegial discussion. The Institute has demonstrated the same consistency of results as Yale in reaching and improving inner city teacher practice. Institute Fellows are nurtured and encouraged to deepen their practice, reflecting continuously on how to ensure urban public school students secure rigorous academic preparation and develop a lifelong love of learning and habits of critical thinking on all manner of topics. Institute encourages teachers to challenge their students to understand more, to do more, to be more. This is precisely what highly effective teachers do.” In Delaware, Steven Godowsky, former Superintendent of the New Castle County Vocational Technical School District wrote, “We have given the Delaware Teachers Institute high priority as part of our Balanced Scorecard Strategic Plan. We believe that the intense professional learning provided through the Yale Initiative and our locally based Delaware Teachers Institute will be an important factor in our quest for school improvement. The Delaware Teachers Institute is a unique program that would serve to meet several significant professional development needs for teachers, and as such, compliments our efforts with Race to the Top.” Tony Marchio, former Superintendent of the Appoquinimink School District has written that the planned Delaware Teachers Institute is not only “in perfect alignment with the District’s strategic plan,” it also supports the state’s reform plan. “The Delaware Department of Education’s Race to the Top application had in mind precisely the scope and dimensions of our planned Teachers Institute as a supportable professional development model... Our state was fortunate enough to be a recipient of the Federal Race to the Top grant, and again, this grant is rooted in the very principles of the Yale project. In both projects, improving teacher quality is paramount and recognized as having, above all else, the biggest impact on student achievement. Delaware Secretary of Education Lillian Lowery has written: “A successful Delaware Teachers Institute in New Castle County will provide a systemic, far-reaching way to engage numerous public school teachers with University of Delaware faculty members in developing high-quality curriculum units. The success of the Teachers Institute in New Castle County will ultimately impact public schools across all three counties in our state.”

⁶ *The Teachers Institute Approach*, 20-21.

⁷ *The Teachers Institute Approach*, 32.

⁸ Archibald et al., *High-Quality Professional Development for All Teachers*, 4-5.

⁹ *The Teachers Institute Approach*, 1, 21. “The seminar leader and the Fellows study and discuss certain common texts, objects, or places, and each Fellow prepares during the period of the seminar meetings at least two drafts of a substantial ‘curriculum unit’ that he or she intends to employ in the classroom during the following year” (Article 6, *ibid.*, 20). Through the curriculum units they write, teachers create engaging deeper learning for their students and increase the academic rigor of school courses. In one study, 60 percent of Institute participants reported that student attention and motivation were higher while teaching the unit they developed in an Institute seminar, “producing substantially greater content mastery.” See Rogers M. Smith, *To Strengthen Teaching: An Evaluation of Teachers Institute Experiences* (New Haven: Yale-New Haven Teachers Institute, 2009), 6, 19. Available online at teachers.yale.edu.

¹⁰ *The Teachers Institute Approach*, 20.

¹¹ Smith, *To Strengthen Teaching*, 10.

¹² *The Teachers Institute Approach*, 20-21.

¹³ Smith, *To Strengthen Teaching*, 21.

¹⁴ Kwang-Suk Yoon et al., *Reviewing the Evidence on How Teacher Professional Development Affects Student Achievement*, Issues and Answers Report (Washington, D.C.: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest, 2007), 5, http://ies.ed.gov/ncee/edlabs/regions/southwest/pdf/REL_2007033.pdf.

¹⁵ *The Teachers Institute Approach*, 20.

¹⁶ Smith, *To Strengthen Teaching*, 10.

¹⁷ Archibald et al., *High-Quality Professional Development for All Teachers*, 7.

¹⁸ *The Teachers Institute Approach*, 19-20.

¹⁹ Rogers M. Smith, *To Motivate My Students: An Evaluation of the National Demonstration Project of the Yale-New Haven Teachers Institute* (New Haven: Yale-New Haven Teachers Institute, 2004), 4.

²⁰ Gita Z. Wilder, preface to *A Progress Report on Surveys Administered to New Haven Teachers, 1982–1990* (New Haven: Yale-New Haven Teachers Institute, 1992), iii. Available online at http://teachers.yale.edu/publications/index.php?skin=h&page=progress_report.

²¹ Smith, *To Strengthen Teaching*, 6.

²² Archibald et al., *High-Quality Professional Development for All Teachers*, 8.

²³ By increasing the number of seminars offered and teachers served in a given year without proportionally increasing administrative costs, an Institute becomes yet more cost effective.

²⁴ In 2010, Taylor B. Arnold of the Yale University Department of Statistics developed a discrete event simulation model for estimating the number of students reached by Teachers Institutes. Each Institute reaches not only the students to whom every Fellow teaches his or her curriculum unit in the first and succeeding years after Institute participation, but also others of those teachers' students in the first and future years who benefit from the teachers' increased confidence, enthusiasm, knowledge of the subject(s) taught, and teaching strategies. In addition, teachers other than the unit authors, both other Fellows and non-participants, use the curriculum units Fellows write, which are promoted by Institute Representatives in participating schools and are freely available online. The number of students reached by each Institute varies according to the year each Institute began or will begin operation and the number of teacher participants in each year. In Arnold's model, over five years, seven Teachers Institutes in communities across the country could reach 250,000 individual students, and most of those students would be taught two, three, or more Institute-developed curriculum units. At this rate, an Institute's annual offering of seminars could be provided for as little as \$4.88 per student impacted. See "Modeling the Number of Students Reached by Teachers Institutes," unpublished paper prepared by Taylor B. Arnold of the Yale University Department of Statistics, April 2010.

²⁵ Smith, *To Strengthen Teaching*, 10.

²⁶ Some of these issues include shifting student demographics, use of quasi-experimental designs without accounting for the baseline student data, heavy teacher attrition in and out of the study, self-selected sampling, lack of adequate data, and lack of adequate measures that address the direct impact of the professional development provided – thus indirect correlations between teacher learning and student achievement become tenuous. One extensive 2007 literature review found that of the 1,300 studies reviewed, only nine met the standards for rigorous evidence established by the U.S. Department of Education's Institute of Education Sciences. See Yoon et al., *Reviewing the Evidence on How Teacher Professional Development Affects Student Achievement*.

²⁷ Ellen E. Kisker, "The Teachers Institute Theory of Change," *On Common Ground*, no. 14 (Fall 2011), forthcoming.