



# YALE NATIONAL INITIATIVE

*to strengthen teaching in public schools®*

Curriculum Units by Fellows of the National Initiative

2009 Volume VI: W. Mark Saltzman, Professor of Chemical and Biomedical Engineering

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## Preface

In April 2009 the Yale National Initiative to strengthen teaching in public schools® accepted seventy-two public school teachers from fourteen school districts in eleven communities in ten states to participate in seven national seminars held at Yale. The Initiative is a long-term endeavor to establish exemplary Teachers Institutes in under-served school districts in states throughout the country. Following the approach developed in New Haven and demonstrated in other cities, it builds upon the success of a four-year National Demonstration Project. The League of Teachers Institutes® is an alliance that advances their work locally and nationally.

Teachers Institutes are educational partnerships between universities and school districts designed to strengthen teaching and learning in a community's public schools. Evaluations have shown that the Institute approach enhances teacher quality in the ways known to improve student achievement and encourages participants to remain in teaching in urban schools.

About two thirds of the teachers, named Yale National Fellows, were from seven communities that are planning or exploring the establishment of a new Teachers Institute: Charlotte, NC; Chicago, IL; DeKalb County, GA; New Castle County, DE; Richmond, VA; San Francisco, CA; and Santa Fe, NM. Other National Fellows were from existing Institutes in Houston, Philadelphia, Pittsburgh, and New Haven that are members of the League of Teachers Institutes. The Fellows attended an Organizational Session of the seminars held in New Haven on May 1-2. The seminars reconvened during a ten-day Intensive Session from July 6-17.

The seminars, which concluded in mid-August when the Fellows submitted their completed curriculum units, included "Storytelling around the Globe," led by Dudley Andrew, R. Selden Rose Professor of Film Studies and Comparative Literature; "Green Chemistry," led by Gary W. Brudvig, Eugene Higgins Professor of Chemistry and Professor of Molecular Biophysics and Biochemistry; "The Rise, Fall, and Rise Again of the Civil Rights Movement," led by Robert A. Burt, Alexander M. Bickel Professor of Law; "Shakespeare and Human Character," led by Paul H. Fry, William Lampson Professor of English; "The Sound of Words: An Introduction to Poetry," led by Langdon L. Hammer, Professor of English and of American Studies; "The Brain in Health and Disease," led by W. Mark Saltzman, Goizueta Foundation Professor of Chemical and Biomedical Engineering; and "Energy, Climate, Environment," led by John P. Wargo, Professor of Environmental Risk Analysis and Policy.

The twin purposes of the program were to acquaint public school teachers with the Teachers Institute approach to high-quality professional development, and to cultivate their leadership in either creating or sustaining such an Institute. Each participating teacher wrote a curriculum unit to teach his or her students what they had learned, to share with teachers in their school district, and to disseminate to other teachers internationally over the Internet. The units contain five elements: objectives, teaching strategies, sample lessons and classroom activities, lists of resources for teachers and students, and an appendix on the district

standards the unit implements. The curriculum units National Fellows wrote are their own; they are presented in seven volumes, one for each seminar.

The Yale-New Haven Teachers Institute is a permanently endowed unit of Yale University, which undertook the National Initiative in 2004. The material presented here does not necessarily reflect the views of the funding agencies.

James R. Vivian

New Haven

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