

Patrick F. Kenealy, Professor of Physics and Science Education

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Education: Loyola University, Chicago, B.S. (Physics), 1961; University of Notre Dame, Ph.D. (Physics), 1967; Stanford University (Study of biology and biophysics), 1976-77; NSF School in Current Bio. Problems (Battelle), 1977; University of California, Berkeley (Cognitive Science), 1984-85; Carnegie Academy for the Scholarship of Teaching and Learning, 2001-02; University of Minnesota (physics education innovation and research), 1994-95; University of Michigan and Michigan State University, 2003 (second-language learning and discourse perspectives in the classroom).

Appointments:

California State Univ., Long Beach, Chair of the Department of Physics and Astronomy	2004-2008
California State Univ., Long Beach, Professor of Physics and Science Education	1988-present
Visiting Scholar, University of Michigan and Michigan State University	2002
Carnegie Scholar, Carnegie Academy for the Scholarship of Teaching and Learning	2001-2002
Visiting Professor, University of Minnesota	1994-95
Director of Science and Education, Pro Tem, Detroit Science Center	1988
Wayne State University, Associate Professor	1973-1988
Visiting Scholar, UC, Berkeley, Education in Math., Science, and Tech.	1984-85
Stanford Synchrotron Radiation Project, Research Staff, Summer	1977
NSF Faculty Fellow in Science, Stanford University	1976-77
Danforth Associate	1975-81
Wayne State University, Assistant Professor	1967-72

Other:

Editorial Board of *Exchanges*, an on-line peer-reviewed journal published by CSU Center for Teaching and Learning (2000-2006)

Session Chair, The International Society for the Scholarship of Teaching & Learning, 2004

Organizer of a one-day faculty development workshop for faculty of all disciplines for *Sigma Xi* and LBSTEP, inviting Professors Ken and Pat Heller of the University of Minnesota, *Engineering an introductory physics curriculum: A case study of course design and assessment using a research-based model.* (3/2000)

Steering Committee member for the NSF grant awarded to the CNSM, *Long Beach Elementary Science/Math Teacher Education Partnership*, (1999-2003)

Member of the *California Elementary Subject Matter Advisory Task Force*, California Commission of Teacher Credentialing. 1999-2000

Distinguished Faculty Teaching Award, California State University Long Beach, 1993-94

Served on six National Science Foundation panels evaluating proposals for the NSF Teacher Enhancement Program and NSF Curriculum Development Program

Physics for Gifted and Talented 8th Graders (Summer, 1986)

Recent Grants awarded in Physics Teacher Training, Science Education, Learning in the Sciences, and Physics Curriculum Development:

Spencer Foundation Small Research Grant. Similarities Between Science Learning and Adult Second-Language Acquisition: Research on Students' Communication Strategies in Introductory Physical Science
\$35,000; 2002-2003

Carnegie Foundation for the Advancement of Teaching. Similarities Between Science Learning and Adult Second-Language Acquisition: Research on Students' Articulation/ Communication Strategies in Introductory Physical Science
\$6,000; 2001-2002

National Science Foundation. An Adaptation and Implementation Combining Two Successful Programs in Introductory Physics Laboratories at California State University, Long Beach, \$82,770; 2000-2002,

National Science Foundation. Structural, Organizational, and Narrative Coherence: Designing the Introductory Physics Laboratory to Increase Retention of Prospective Science and Engineering Majors, with Special Attention to the Needs of Women and Minorities. \$200,953; 1991-96

U.S. Department of Education, Fund for the Improvement of Post-Secondary Education (FIPSE). A Way to Change Social and Intellectual Interactions in Introductory Physics Laboratories to Conform to Research Findings on Learning. \$138, 000; 1991-95

National Science Foundation, An Interdisciplinary Physical Science Course for Preservice Teachers and General Education Students: Telling and Directing Coherent Stories. \$150,000; 1989-94

Recent talks

Kenealy, Patrick (2004) . *Learning Introductory Physics is Adult Second-Language Acquisition* The International Society for the Scholarship of Teaching & Learning, Indiana University, Bloomington, IN

Books, Manuals, etc.:

Physics, the Reasoning. Physical Science textbook, Houghton-Mifflin, 2004.
Physics 100A Laboratory Manual, and *100A Instructor's Guide*, 2000-2005
Physical Science Laboratory Manual, Patrick Kenealy, Kendall-Hunt, 1992-2005.

Professional Meetings: *Annually attend meetings* of the American Association of Physics Teachers, American Association for the Advancement of Science, and National Association for Research in Science Teaching. During the past 5 years, I also attended two annual meetings of the American Educational Research Assoc. and two annual meetings of the American Psychological Assoc., both of which have sessions related to my interests.

Abbreviated List Of Department/College/University Service:

RTP Committee, Chair, in Physics (1995-97), in Science Education (Chair, 1998-00), Committee to Rewrite the College RTP Document (1996-97); Chair of the College RTP Committee (1996-98; 2003-04); Member of College RTP Committee (1999-2003) Univ. Liberal Studies Comm. (1991-93, 1995-2003); Physics Department Curriculum Committee (1996-2001; 2003-04); Science Education Tenure-track Search Committee (1999-2001); Grade Appeals Comm., Chair, Physics (1995-2004 (except for a sabbatical semester)); Coordinator of Laboratories, Phys. Sci. 112, (1989-2005), Phys. 151, (1990-1994), Phys. 100A Labs (1998-2005); Physics Dept. Council (1992-93, 1998-99); Interim Chair of Physics (2004-05); Editorial Board of *Exchanges*, an on-line peer-reviewed journal published by CSU Center for Teaching and Learning (2000-2005); Faculty Center for Professional Development Advisory Board (2003-2005).