

Jack M. Wilson

Vita

President Emeritus, The University of Massachusetts
Distinguished Professor -Emeritus
DrJackMartinWilson@outlook.com

Personal

Listed in: Who's Who in America, Am. Men of Science, and others.
Fellow of the American Physical Society
Fellow of the American Association of Physics Teachers
Fellow of the National Online Consortium –Formerly the Sloan Foundation Consortium
Honorary Doctorate Degree -The University of Massachusetts Lowell 2019
Honorary Doctor of Science (Honoris Causa); Thiel College 2003
Chancellors Medal -UMass Medical School 2011.
Chancellors Medal -The University of Massachusetts Boston 2011
Chancellors Medal -UMass Dartmouth 2011

Experience

2011- President Emeritus, The University of Massachusetts
2011- Distinguished Professor of Higher Education, Emerging Technologies, and Innovation, The University of Massachusetts Lowell (retired June 2022)
2012-2013 Dean of Engineering (interim from 1 October 2012- 15 July 2013)
2011-2012 President of the Edward M Kennedy Institute for the United States Senate
2003- 2011 President, The University of Massachusetts System
2003 Vice President for Academic Affairs, The University of Massachusetts System
2001-2003 Chief Executive Officer, UMassOnline and Vice President, University of Massachusetts
2001-2011 Professor of Management, The University of Massachusetts, Amherst
1998- President and CEO, Jack M. Wilson Inc.
1997-2001 J. Erik Jonsson '22 Distinguished Professor of Physics, Engineering Science, Information Technology, and Management
1990-2001 Professor of Physics, Engineering Science, Information Technology, and Management
1999-2001 Co-Director, The Severino Center for Technological Entrepreneurship
2000 Chief Scientist, Mentergy Corporation
1994-2000 Chairman and Founder, LearnLinc Corporation (formerly ILINC)
1998-99 Acting Provost, Rensselaer Polytechnic Institute
1997-98 Acting Dean of Faculty, Rensselaer Polytechnic Institute
1997-99 Acting Dean of the Graduate School, Rensselaer Polytechnic Institute
1995-99 Dean, Undergraduate and Continuing Education, , Rensselaer Polytechnic Institute

1997-99 Chairman of the Board, Rensselaer at Hartford Graduate Center
1994-95 President, ILINC, Interactive Learning International Corporation
1984- Consultant: Many including: IBM, Lucent Technologies, AT&T, MCI, Ford, Hewlett Packard, HarperCollins, John Wiley, News Corp, etc.
1990-95 Director, Lois J. and Harlan E. Anderson Center for Innovation in Undergraduate Education, Rensselaer Polytechnic Institute
1992-94 Consulting Scholar, IBM Corporation
1982-90 Executive Officer, American Association of Physics Teachers
1984-90 The University of Maryland, Professor of Physics and Science Teaching Center, Co-Director, Maryland University Project in Physics and Educational Technology
1983-91 American Institute of Physics, Governing Board and Executive Committee
1985-90 Director, U.S. Team in the International Physics Olympiad
1982-84 State University of New York at Stony Brook, Guest Scientist
1972-82 Sam Houston State University, Department of Physics
1981-82, Director, Div. of Chemistry, Physics, and Physical Sciences
1979-81, Chairman, Department of Physics
1978 Associate Professor of Physics
1972-78, Assistant Professor of Physics
1969-70 Kent State University, Salem Branch, Instructor of Physics Education

Education

Ph.D. Kent State University, Kent, Ohio, Ph.D. (1972), M.A.(1970), 1968-72
A.B. Thiel College, Greenville, Pennsylvania, A.B. (1967), 1963-1967

Board Memberships

UMass Memorial Medical Center. UMass Memorial Health Care system with five hospitals serving most of central Massachusetts.(System Board then Community Hospital Board, and several committees. 2010- present.
Chair, River Hawk New Venture Investment Advisory Board- 2014-present.
Advanced Cyber-Security Center Board Member and Chair of the Governance Committee, 2011-present.
Privo Technologies -Advisory Board (new venture MIT spin-off) 2011-present.
Chair, Commonwealth of Massachusetts Mass Tech Collaborative, Innovation Institute Investment Advisory Committee. 2005-present
Innovation Partnership Network (IPN), New England Regional Industry, Government, University Partnerships, 2010-2018.
Chairman of the National Advisory Board of the U.S. Dept. of Education Fund for the Improvement of Post-Secondary Education (FIPSE). 2010-2014.
Chairman of the New England Defense Technology Initiative 2011-2013.
The National Board of Directors of the American Public and Land Grant Universities (APLU) 2009-2011.
Chair of the Commission on Innovation Competitiveness and Economic Prosperity (CICEP) of American Public and Land Grant Universities APLU 2009-2011.

National Security Higher Education Advisory Board (advising the FBI, CIA, and Homeland Security) 2010-2011.

National Academy of Science/National Research Council Committee on Undergraduate Education Research and Implementation 2010-2012

Co-Chair (with Presidents Drew Faust, Harvard; Susan Hochfield, MIT, and Henri Termeer, Genzyme) of the Massachusetts Life Science Collaborative of Business and Universities. 2007-2011.

Vice Chair of the Commonwealth Life Science Center charged with dispersing an anticipated \$ 1 Billion in investments in the Life Science Sector. (Five member Board Chaired by the Secretary of Economic Development.) 2007-2011.

Member of the Board of the Massachusetts Clean Energy Center; 2008-2011.

United States Commissioner of the Education Commission of the States; Appointed by Governor Mitt Romney and re-appointed by Governor Deval Patrick; 2005-2012

National Leadership Council of the Association of American Colleges and Universities program on Liberal Education and America's Promise

Alliance for Research in Science and Technology for America (ASTRA) 2004-2011.

Council on Competitiveness (member). 2005-2010.

The New England Council. 2004-2011.

Co-Chair (with Blenda Wilson, CEO of NellieMae) of the Massachusetts Great Schools Initiative Math and Science Task Force.

John Adams Innovation Institute; Board and Executive Committee 2004-2005

Massachusetts Technology Leadership Council (MassTLC) 2004-

Massachusetts Continuing Legal Education organization (MCLE) 2002-2006

Selected Awards

2015 Named Fellow of the Online Learning Consortium

2014 Named Fellow of the American Association of Physics Teachers

2013 The Frank Mayadas Leadership Award, <http://sloanconsortium.org/sloan-c-awards/2013>

2011 FBI –Award for Exceptional Service in the Public Interest

2010 Massachusetts Technology Leadership Council: Workforce Leader of the Year

2010 Good Scout Award by the Knox Trail Council of the Boy Scouts of America; Nov. 2010

2005 Mass High Tech Magazine designated him as a 2005 Massachusetts All Star.

2005 Massachusetts Network Communication Council honored him for his long term contribution to the industry.

2004 Massachusetts Alliance for Economic Development: Statewide Strategic Asset award. (on behalf of the University)

2003 Honorary Doctor of Science (Honoris Causa); Thiel College

2001 United States Army: Outstanding Civilian Service Medal by the United States Army for service to the Army Education program.

1998 Named Fellow of the American Physical Society

1997 Excellence in Education Award from Bell Atlantic

1996 Pew Charitable Trust Award for Outstanding Achievement in Undergraduate Education

1995 Theodore Hesburgh Award for Innovation in Undergraduate Education from TIAA/CREF
Awarded at the Annual Meeting of the American Council on Education, presented by
TIAA/CREF and Secretary of Education Richard Riley. Speaker: President William Clinton.
1995 Boeing Outstanding Educator Award: Top national award presented by Boeing.
1995 Distinguished Service Citation, Am. Association of Physics Teachers at the Annual Meeting.
2001 Outstanding Civilian Service Medal, United States Army; For service to the Army Education
Program

Funded Research and Special Projects:

National Science Foundation, I-Corp Program 2016. Co-PI 2021
Kauffman Foundation, 2002, \$143,000, Technology Enhanced Entrepreneurship Education - TE3
Kauffman Foundation, 2001, \$150,000, Technology Enhanced Entrepreneurship Education - TE3
Pew Charitable Trusts, 1999, \$8.8 million, "Center for Academic Transformation," with Carol
Twigg.
Lucent Technologies, 1998, \$132,000, "Perspectives on Distance Learning for Leadership in
Corporate Education and Training," 1 year, with M. Danchak and B. Lister.
Lucent Technologies, 1998, \$300,000, "Pre-College Long Distance Learning Initiative," 3 years,
with W. Jennings, B. Lister and L. Schowalter.
Intel Corporation, 1997, \$2,400,000, "Technology for Education 2000 Program," 3 years, with C.
Geisler, J. Kolb, B. Lonsway, D. Millard, M. Shephard and W. Wallace.
AT&T Foundation, 1997, \$300,000, "Rensselaer's Pre-College Long Distance Learning Initiative,"
3 years, with J. Kolb, L. Rubenfled and B. Lister.
Hewlett Foundation, 1997, \$150,000, "Applying the 'Studio' Course Model to General Education
in the Humanities and Social Sciences," 2 years, with Faye Duchin.
Sloan Foundation, \$125,000, Asynchronous Learning Courses in Science and Engineering.
Hewlett Packard Corporation, 1996, \$500,000, "Technology Enhanced Learning:
StimuLinc@Distance," with W. Jennings, D. Walsh (Cal Poly) and Ken Connor.
National Science Foundation, 1996, \$200,000, Recognition Award for Institution-wide Reform of
Undergraduate Education, with R. Byron Pipes.
National Science Foundation, 1996, \$850,000, "Computing Infrastructure for Research and
Education," with M Shephard, J. Kolb, W. Jennings, and F. Luk.
Anonymous, 1996, \$330,000, "A Longitudinal Evaluation of the Studio Courses at Rensselaer."
National Science Foundation, 1995, \$4 million, "Mathematics and its Applications in
Engineering and Science: Building the Links," 5 years, with W. Boyce and R. Spilker.
AT&T Foundation, 1994, \$500,000, "International Center for Multimedia Education," Principal
Investigator.
The Annenberg/CPB Projects, 1994, \$97,421, "CUPLE II: A Multimedia Introduction to Electricity
and Magnetism," with W. Roberge.
National Science Foundation, 1994, \$49,433, "Mathematical Sciences and Their Applications
Throughout the Curriculum," with B. Boyce and J. Brunski.
National Science Foundation (DUE-9451274), 1994, \$30,367, "Laboratory Development for a
Workshop Course in Introductory Physics," with Wayne Roberge.
ARPA: Technology Re-investment Program, 1994, \$996,319, " Interactive Learning Modules for
Manufacturing Engineering Education and Training," with Arthur Sanderson, et al.

National Science Foundation (DUE-9350168), 1993, \$28,838, "Conference on the Introductory Physics Course," Principal Investigator.

AT&T Business Communications Systems and Bell Laboratories, 1993, \$143,000, "An Interactive Distance Learning Environment for Networked Multimedia Courses," Principal Investigator.

The IBM Corporation, 1992, \$31,200, "Development of an Integrated Multimedia/Data Acquisition Environment in the Introductory Physics Laboratory" Project Director.

National Science Foundation (USE-9156238), 1992, \$320,349, "Computing Across the Basic Sciences," J. M. Wilson and Harry McLaughlin, Co-principal Investigators.

National Science Foundation (USE-9156228), 1992, \$320,383, "The Comprehensive Unified Physics Learning Environment," J. M. Wilson, Principal Investigator; E. F. Redish (Maryland), Co-principal Investigator.

The Sloan Foundation (92-4-2), 1992, \$75,000, "A Design and Manufacturing Learning Environment;" Susan Sanderson, Principal Investigator; JM. Wilson and Michael Andrews (New Hampshire).

The IBM Corporation, 1991, \$40,000, "The Comprehensive Unified Physics Learning Environment," Project Director.

The Annenberg CPB Project, 1989, \$100,000, "The Unified Physics Learning Environment," J. M. Wilson, Principal Investigator; E. F. Redish and C. K McDaniel (Maryland), Co-principal Investigators.

IBM, 1989, \$315,000, "CUPLE: The Comprehensive Unified Physics Learning Environment," J. M. Wilson, Principal Investigator; E. F. Redish and C. K McDaniel (Maryland), Co-principal Investigators.

United States Information Agency, 1990, \$28,000, "US-Soviet Physics Student Exchange," Project Director, July-August 1990.

National Science Foundation, 1989, \$29,520, "U.S.-Soviet Physics Student Exchange," Project Director (with E. Lozansky and A. Maton), July-August 1989.

National Science Foundation, 1989, \$66,750, "U.S.-Japan-China Tri-Lateral Conference."

Office of Naval Research, 1989, \$10,000, "U.S. Physics Team for the International Physics Olympiad."

National Science Foundation, 1987, \$587,605, "Physics Teaching Resource Agents 1987 Program", Project Director (with J. Layman, U. Maryland). (expires May 1, 1989).

National Science Foundation, 1986, \$68,600, InterAmerican Conference on Physics, Mexico City, Mexico, July 1987, Project Director (expires Jan 1, 1989).

National Science Foundation, 1986, \$437,840, "Physics Teaching Resource Agents 1986 Program", Co-Director (with D. Kirwan, Rhode Island). (expires Jan 1, 1989).

National Science Foundation, 1986, \$36,000, "U.S. Delegation to the International Commission on Physics Education", Project Director, August 1986, Tokyo Japan.

National Science Foundation, 1985, \$82,026, "Teaching Modern Physics" Co-Director (with Leon Lederman, Fermi National Laboratory).

Department of Education, 1985, \$502,842, Fund for the Improvement of Post-Secondary Education, Maryland University Project in Physics and Educational Technology, Co-Director (with E. F. Redish, Maryland).

National Science Foundation, 1985, \$477,275, "Physics Teaching Resource Agents National Program", Co-Director (with D. Kirwan, Rhode Island).

National Science Foundation, 1984, \$20,000, Topical Conference on Teacher Institutes and Workshops, Project Director

Woodrow Wilson Foundation, 1984, \$2000, Planning for an Honors Physics Workshop, Project Director

Exxon Ed. Foundation, 1983, \$39,000, Developing Student Confidence in Physics: A Multi-media Workshop for Physics Faculty, Project Director

Department of Education (FIPSE), 1982, \$34,184, Training Women in Science and Technology (Project Administrator only)

Department of Energy, 1981, \$18,730, Integration of Energy Topics in the High School Curriculum, Project Director

National Science Foundation, 1981, \$34,330, "Pre-College Teacher Development in Physical Science and Energy Education," Director

National Science Foundation, 1980, \$173,068, CAUSE, "Upgrading of Advanced Laboratory through Integration of Graphic Computing Systems," Director

National Science Foundation, 1979, \$32,466, "Pre-College Teacher Development Physical Science Workshop," Director

National Science Foundation, 1978, \$31,074, "Pre-College Teacher Development in Science," Director

Exxon Educational Foundation, 1978, \$7,800, "Computer Experimental Simulation in the Modern Physics Laboratory," Director

Welch Foundation, 1979-1980, \$12,000, "Mossbauer Spectroscopy of HbS and Other Liquid Crystals," Principal Investigator

Welch Foundation, 1978-1979, \$14,000, "Mossbauer Spectroscopy of HbS and Other Liquid Crystals," Principal Investigator

Welch Foundation, 1977-1978, \$14,000, "A Mossbauer Investigation of Sickle Cell Hemoglobin," Principal Investigator

Welch Foundation, 1974-1977, \$30,000, "A Mossbauer Investigation of Sickle Cell Hemoglobin," Principal Investigator

Welch Foundation, \$3,866, Supplementary Grant

Research Corporation, 1973, \$7,515, "Mossbauer Spectroscopy of Sickle Cell Hemoglobin," Principal Investigator

Sigma Xi, 1973, \$150, Research in Sickle Cell Hemoglobin

President's Fund, 1975, \$7,500, Graphic Computer System

Service To National, And International Organizations:

Editorial Board Member, International Journal of Electronic Business; Olney Bucks, MK46 5WB United Kingdom (www.inderscience.com); 2001-

National Research Council: "Improving Undergraduate Instruction in Science, Technology, Engineering, and Mathematics;" Committee on Undergraduate Education; 2003.

National Academy of Engineering: "Workshop on Information Technology-Based Education Materials;" 2002.

American Society for Engineering Education; "Engineering Education for a Global Economy;" Joint U.S.-China commission sponsored by the NSF and China Natural Science Foundation; 2002.

Massachusetts Continuing Legal Education Inc.; Board of Directors; 2002-.

American Association of Colleges and Universities; "Greater Expectations National Steering Committee;" 2000-2002.

National Research Council; "Workshop on the Roles of Information Technology in Improving Teaching and Learning in Undergraduate Science, Mathematics, and Engineering Education;" Steering Committee; June 2000.

National Research Council Physics Survey Overview Committee, 1998-2001.

New York State Education Department Commissioner's Doctoral Council, 1998-2001.

Southern University and College Coalition for Engineering Education (SUCCEED) External Advisory Board, 1998-2001.

MIT "Force Field: Using Animation to Teach Electromagnetism" Advisory Board, 1998-2001.

Department of the Army Distance Learning/Training Technology Applications Subcommittee, Member, 1996-2001.

National Research Council Committee on Physics Survey, Member, 1997-2001 .

American Physical Society FED Executive Committee, 1997-2003, Chair in 2001-2002 .

National Academy of Science Committee on the Digital Library. Chair 1997-98.

National Academy of Science Committee on Information Technology. Member 1995-2000.

NAS/NRC Physics Education Program Initiation Committee, Member, 1997.

EDUCOM National Learning Infrastructure Initiative, Steering Committee Member and Partnership Chair, 1994-98.

National Science Foundation Visiting Committee, Harvard University, Physics Department, Chair, 1996-97.

Empire State College Presidential Technology Panel, Member, 1996.

Institute for Research on Higher Education Expert's Committee, Member, 1996.

New York State Telecommunications Advisory Committee, 1994-2000.

Institute for Academic Technology (IAT) Advisory Committee, 1993-98.

Director, Six Country Study of Science Education, 1995-96.

International Union for Pure and Applied Physics, U.S. Steering Committee, (1985-91)

American Institute of Physics, Governing Board and Executive Comm., (1983 - 91)

NSF Statewide Systemic Initiatives Panel and Moderator of the Site Visit Team, (1991)

InterAmerican Council on InterAmerican Conferences, Member, (1985-1988)

Director, U.S. Team in the International Physics Olympiad (1985- 90)

"Conference on the Future of the U. S. Doctoral Physics Institutions," A Topical Conference of the AAPT and the Am. Phys. Society, Staff Director and Steering Committee, 1989.

Triangle Coalition (Business, Labor, Science, and Education) for Science Education, Steering Committee, (1984 - 87)

U.S. Presidential Awards for Science Teaching, Steering Comm. and National Selection Committee, (1983-87)

American Physical Society Education Committee, liaison,(1982 -90).

Editor, "AAPT Announcer", (Sept 1982 -90)

National Committee on Professional Concerns, American Association of Physics Teachers, Member 1979-1983, Chairman 1982

Review Panelist, many NSF programs in research and education

Member of many other Committees for AAPT, AIP, and APS.

Outstanding Young Man of America, 1977 and 1978

Books

- Changing the World: Entrepreneurship; 2012, 2018, 2021 Open Courseware textbook
<http://www.jackmwilson.net/Entrepreneurship/Principles/Changing-The-World-Entrepreneurship.pdf>
- Proceedings of the Conference on the Introductory Physics Course: on the occasion of the retirement of Robert Resnick, (1993 Troy, NY) J. M. Wilson, Editor, John Wiley and Sons, Inc, New York, 1996.
- The Comprehensive Unified Physics Learning Environment, J. Wilson, E. Redish, and C. McDaniel, American Institute of Physics, 1994.
- M.U.P.P.E.T., J. Wilson, E. Redish, and I. Johnston, American Institute of Physics, 1994.
- Teacher Institutes and Workshops, P. Lindenfeld and J. Wilson editors, (AAPT, College Park, MD, 1985).
- The Education of the Physicist, J. Wilson editor, (NY: AAPT, 1984).
- Introduction to eBusiness: The Hope, the Hype, the Power, the Pain; J. M. Wilson.

Invited Lectures (National and International):

- "Entrepreneurship: Promoting Government-Industry-University Partnerships;"* Prague, Czech Republic; November 10-15, 2016
- "Entrepreneurship: Promoting Government-Industry-University Partnerships;"* Bratislava, Slovakia on November 10-15, 2016
- "Growing Up With the Faculty of Information Technology- Challenges: Then and Now;"* Gamma Nu Eta National Honorary Society for Information Technology Meeting; Troy, NY; April 19, 2017
- "Disrupting the Future of Higher Education;"* Next Generation Learning Spaces Conference; Nashville, TN; February 24, 2015.
- "Evolving Learner Centered Environments;"* Next Generation Learning Spaces Conference Nashville, Tennessee February 24, 2015.
- "The Dreaded and Most Important Talk: Financials -Everyone wants universities to change, but exactly how is not so clear;"* New Directions in Online Learning; San Diego, California October 30, 2014.
- "University-Industry-Government Research Context;"* MassInsight, Conference on Innovation Partnership Networks. Boston, MA, 19 June 2014.
- "On Entrepreneurship Education –Insights;"* University of Massachusetts, Conference on Entrepreneurship Education, Boston, MA June 16, 2014
- "Universities in a Time of Change,"* Distinguished Lecture Series, Univ. of Central Florida, January 30, 2014.
- "Will Physics Lead, Follow, or Get Out of the Way?"* Physics Department Colloquium, Univ. of Central Florida January 31, 2014.
- "Radical Change in Higher Education: Will Physics lead, follow, or get out of the way?"* APS/AAPT Conference on Distance Education and Online Learning; College Park, MD June 1, 2013.
- "The Myth of MOOCs"* (See also my comments on the MIT-Harvard report on edX)

"Innovations in eLearning: MOOCs and Beyond;" Rensselaer Polytechnic Institute Annual Colloquium on Teaching and Learning; Troy, NY April 19, 2013

University Professional and Continuing Education Assn.; *"High Expectations-No Money: Universities WILL Change the World;"* Boston, MA; April 4, 2013

U.S. Dept. Of Education FIPSE Directors Meeting: *"Will FIPSE Lead the Next (R)Evolution?"* Washington, DC; March 26, 2013

The Association of American Colleges and Universities, Atlanta GA: *"The Digital Revolution... or Evolution: How Universities are Changing."*

The University of Pennsylvania Higher Education Leadership Conference: *"Innovation in an Era of Disruptive Change."*

Sloan-C Conference, Orlando FL, *"Online Education: Evolution or Revolution;"* Press: Inside Higher Ed; Chronicle of Higher Education

White House Conference on the Innovative University: , White House, Wash. DC, *"Higher Education Innovation, and Entrepreneurship In Focus "*

"Research Universities and Economic Development-A National Perspective;"

Am. Society for Engineering Education Deans Conference, Washington, DC Massachusetts *"Green High Performance Computing Center."*

"Wrestling Over the Mission of the University;" Jack M. Wilson, PhD 2012; New York State Board of Regents Committee: Online Learning-A Strategic Tool

New England-Canada Business Council: *"Encouraging Innovation/Growing Partnerships;"*

"Out of Turmoil and Conflict Comes Opportunity for Change;" Graduation Speech at Kent State University; May 16, 2009; Kent, Ohio.

"Graduation Speech at Kyushu University," Kyushu University; Fukuoka, Japan; Spring 2008.

"The Future Student at the University of Massachusetts;" A Presentation to the Board of Trustees, August 22, 2006.

"In An Age of Terror: Is Reconciliation Possible;" Westborough Congregational Church, October 29, 2006

"UMass and the Innovation Economy," Presentation to the Waltham West Chamber of Commerce, Waltham, MA 13 Jan 2006.

"Online Education: 'Reverse Engineering' Higher Ed;" Keynote speech to the Sloan International Conference; Orlando FL; 18 Nov 2005.

"The Gathering Storm in K-12 STEM Education;" Presentation to Governor Romney; October 18, 2005.

"The Never Ending Education: How Universities Must and Can Meet the Educational Needs of Students and Alumni for Life;" Keynote Speech; WebCT Impact 2005; San Francisco, CA; July 21, 2005.

"Creating New Learning Environments for Engineering Education: How Educational Research Drives Change;" Distinguished Lecture Series; 2005 ASEE Annual Conference; Portland Oregon; June 15, 2005.

"The Maintenance Contract for Higher Education," University Continuing Education Association, March 30, 2005.

"The State of New England Online Education;" The New England Board of Higher Education; Woodstock, VT; Nov. 5, 2004.

"Engineering: Global Opportunities, Global Challenges, Global Thinking;" International Colloquium on Engineering Education; Keynote speech Tsinghua University, Beijing, China; September 8, 2004.

"UMass The Innovation Imperative;" presented to the Mass Software Council Annual Meeting; Sheraton Boston; 1 September 2004.

"Globalism, Outsourcing, and the American University;" J. M. Wilson; presented to the Council of State Governments Eastern Regional Conference in Springfield, MA; August 9, 2004.

**Guest Commentary: Massachusetts science, tech strategy should include its public university system; Mass High Tech magazine; 8/2/2004. By Jack Wilson

**Research, innovation can generate prosperity ; (Sunday, 8/01/2004, The Springfield Republican); by Jack M. Wilson

"After Thiel, What Next?" Graduation Speech to Thiel College May 2004.

"Changing the Paradigm of Education to meet the Growing Demand for New and Emerging Technologies;" IT Futures Forum; Staples Corporate Headquarters; Framingham, MA; 8 January 2004.

**NECN; New England Cable News; Jack Wilson with Jim Braude and Chet Curtis; 15 Dec. 2003.

**"eLearning - Where to Next;" New England Learning Assoc.; Royal Sonesta Hotel; Cambridge, MA; Dec 9, 2003.

**"UMass: A Strategic Asset for the Commonwealth"

"The Innovation Imperative"- Presentation to UMass Research Directors; Nov. 23, 2003.

"WBZ Business Breakfast - November 6, 2003;"

"Creating New Learning Environments in the Convergence of Computers, Communications, and Cognition;" Am. Assn. of Colleges and Universities. Boston, MA; 1 November 2003.

"After the Fall: The Lessons of an Indulgent Era;" Presented at the 19th Annual Conference on Distance Teaching and Learning; Madison, Wisconsin; August 14, 2003.

eLearning in Engineering: " How Technology is Mandating and Transforming Continuing Education: Past, Present, and Future;" Presented at the ASEE 6th WFEO World Congress on Engineering Education & 2nd ASEE International Colloquium on Engineering Education; Nashville, TN; June 21, 2003.

"Exploiting Opportunities in a Bigger Marketplace" Presented at the eLearning Summit in LaQuinta, California on May 5, 2003.

"Massachusetts: The Research and Innovation State." Presentation to MassInsight, Mass High Tech Council, and other New England Business Associations in March 2003.

"Distance Learning as a Self Sustaining Enterprise:" Academic Impressions, Seattle Washington, Jan 20, 2003. and Cambridge Massachusetts, March 27, 2003.

"eLearning in Engineering: The Interplay of Technology and Pedagogy;" Shanghai Jiao Tong (Engineering) University and Beijing University of Engineering and Aeronautics; November 2002.

"Creating New Learning Environments in the Convergence of Computing, Communications, and Cognition - Institutional and Policy Perspectives -;" Presentation to the Committee on Undergraduate Education, National Research Council (NRC); November 19, 2002.

"eLearning: After All the Hype, Is It Over?"; Syllabus 2002, Santa Clara California, keynote, July 31, 2002.

"How Do We Define and Accomplish IT?" Panel; Univ. Cont. Ed. Assoc. 87th Annual Conference; Toronto, Canada; April 17, 2002.

"Trends in Academic Technology;" keynote; Rhode Island Conference on Technology in Higher Education; April 12, 2002.

"Web Based Physics: Perpetuating the Past or Fomenting a Future;" Pacific Northwest Assoc. for College Physics Conf.; keynote; Portland Oregon; April 5, 2002.

"The Challenge of Adapting Organizations and Creating Partnerships to Target New Markets;" Seminar; "University Teaching as eBusiness;" Mellon Foundation sponsored meeting of virtual universities CEO's; Univ. of California, Berkeley; October 27, 2001.

"eBusiness: The Hope, the Hype, the Power, the Pain;" Keynote speech for FleetBoston Financial eBusiness Conference, October 3, 2000.

"eLearning and the Internet Tsunami;" Keynote speech for the Alt-C Conference, Manchester England done by live webcast; Sept 13, 2000.

"eLearning and eBusiness for Entrepreneurs;" keynote speech to the National Foundation for Teaching Entrepreneurship, Wellesley MA; July 26, 2000.

"eLearning, eBusiness, and the new University;" Project Kaleidoscope July 28, 2000.

"How to Create a Culture of Learning;" The Government Technology Conference, Wyndham City Center; Washington, DC June 26, 2000.

"A National Digital Library in SME&T" to the NAS/NRC Task Force on IT; June 20, 2000

"Entrepreneurship and eLearning;" Price-Babson SEE/Reflect Conference; Wellesley, MA; June 2, 2000.

"Distributed Learning Workshop;" AMSTEL Institute, Amsterdam, Netherlands; May 17, 2000.

"Information Technology and Entrepreneurship- A Summary;" at Investing in the Internet; Am. Academy of Arts and Sciences; Boston, MA May 2, 2000.

"Reforming the Undergraduate Curriculum: Faculty Rewards and Responses" Indiana University-Purdue University Joint Conference; Indianapolis, IN; April 11, 2000.

"Distributed Learning: Techniques; Technologies, and Faculty;" Harvard University; Wed. April 5, 2000.

Creating the Studio Classroom;" University of Amsterdam, Amsterdam, Netherlands, March 16, 2000.

"How might changes in technology influence buildings for the 21st century law school;" at Bricks, Bytes and Continuous Renovation; American Bar Association Conference Washington, DC; March 10, 2000.

"Using IT to Learn IT;" at TechEd 2000, Palm Springs California, March 8, 2000.

"Interactive Distance Learning Environments" at The Design and Application of Network Learning Environments Tainan, Taiwan; January 6, 2000.

"Our Collective Future in Information Technology," Beijing Science and Technology Commission, Beijing, 1/14/99.

"Our Collective Future in Information Technology," Peking University, China, 1/14/99.

"Information Technology," State Council Research and Development Center, Beijing, China, 1/13/99.

"Our Collective Future in Information Technology," Rensselaer Information Technology Conference, Hong Kong, 1/12/99.

- "Our Collective Future in Information Technology," Rensselaer Information Technology Conference, Taipei, 1/8/99.
- "Perspectives on Distance Education for Leadership in Corporate Education and Training," Lucent Learning And Performance Center Workshop, Piscataway, NJ, 12/15-16/98.
- "Physics Education," NRC Solid State Sciences Committee, 12/10/98.
- "Perspectives on Distance Education for Leadership in Corporate Education and Training," Lucent Distance Learning Workshop, Englewood, CO, 11/20/98.
- "Gearing Up for IT," Keynote Speaker, Syllabus '98, Sonoma, CA, 7/28/98.
- "How Information Technology is Changing the Way We Teach On Campus and Off," International Conference on IT in Higher Education in Lausanne, Switzerland, 6/24/98.
- "Experiences of Teaching Credit Courses On-line," National Research Council On-line and Distance Education for International Cooperation and Development Meeting, Washington, DC, 12/10/97.
- "Quality Assurance for Distance Learning," Commission on Higher Education 1997 Accreditation and Quality Assurance Conference, Philadelphia, PA, 12/9/97.
- "How Networking is Changing Universities and Redefining Distance Learning," and "New Strategies for Learningware Development: The NLIIP Perspective," EDUCOM, Minneapolis, MN, 10/29-30/97.
- "Continuous Learning Environments: Issues of Cost and Quality," Stanford Forum for the Future of Higher Education Conference, Aspen Meadows, CO, 9/22/97.
- "Teaching Science, Engineering and Mathematics in a Distributed Multimedia Learning Environment," NSF Chautauqua Workshop, University of Pittsburgh and Rensselaer Polytechnic Institute, 7/10-12/97.
- "Case Study Presentation of Rensselaer's Re-Engineering," Collaborative Leadership for Academic Change Conference, AAC&U, Washington, DC, 6/21/97.
- "How Computing, Communications, and Cognition are Making Learning the 'Killer App' of this Generation of Computing," Amsterdam Math, Science and Technology Education (AMSTEL) Conference, Amsterdam, 6/4/97.
- "New Ways of Teaching Physics," - invited talk; 2 invited workshops - "A Demonstration of the CUPLE Physics Studio Experience," Physics Teaching in Engineering Education Conference, Copenhagen, 6/1-3/97.
- "How Distributed Continuous Education Can Increase Quality and Decrease Cost," Higher Education in the Virtual Era Conference, sponsored by the New England Board of Higher Education, Boston, MA, 5/12/97.
- "Reducing Costs, Improving Quality," IDLCON '97, Arlington, VA, 3/25/97.
- "Beyond Enhancement: Using Technology to Raise Quality and Reduce Costs," American Association for Higher Education, Washington, DC, 3/16/97.
- "The Virtual Classroom," Training '97, Atlanta, GA, 2/10-11/97.
- "The Emergence of a Viable Market for Educational Software," Online Educa Berlin, International Conference on Technology Supported Learning, Berlin, Germany, 11/14/96.
- "The Future of Distance Learning: Network Collaborative Software Integrated with Desktop Video Conferencing," Online Educa Berlin, International Conference on Technology Supported Learning, Berlin, Germany, 11/14/96.

"Institution-wide Reform of Undergraduate Education in Science, Mathematics, Engineering and Technology," Frontiers in Education Conference, Salt Lake City, UT, 11/7/96.

"Technology and Distance Learning," Association of Governing Board of Universities and Colleges, Washington, DC, 10/24/96.

"Using Networked Computing and Communications Tools to Bring Continuous Education to Scientists and Engineers," MIT, Cambridge, MA, 10/21/96.

"Continuous Education: The Inevitable Result of Distributed Multimedia on the Internet," The Third Annual Strategic Multimedia Conference, New York, NY, 9/16/96.

"Technology-Mediated Teaching and Learning: Overdue or Pipe Dream?" Western Interstate Commission for Higher Education, Boulder, CO, 8/23/96.

"Re-engineering Undergraduate Education with Computing, Communications & Collaborative Learning," Seminar on Academic Computing, Snowmass, CO, 8/3/96.

"How Computing, Communications, and Cooperative Learning are Changing the Education of Engineers and Scientists," International Conference on Undergraduate Physics Education, University of Maryland, College Park, MD, 8/2/96.

"Demonstration of the CUPLE Physics Studio Experience," Sample Class, International Conference on Undergraduate Physics Education, University of Maryland, College Park, MD, 8/1/96.

"Comprehensive Curriculum Reform at Rensselaer," NSF Shaping the Future: Strategies for Revitalizing Undergraduate Education, Washington, DC, 7/11-13/96.

"National Issues in Engineering Education," ASEE International Conference on Engineering Education and Practice, Washington, DC, 6/22/96.

"Systemic Efforts in the Division of Undergraduate Education," NSF Dynamic Partnerships: Seeding and Sustaining Education Reform Working Conference, 6/20/96.

"Teaching Science and Mathematics in a Distributed Multimedia Learning Environment," Chautauqua Workshop, University of Pittsburgh, State University of California at San Luis Obispo, and Rensselaer Polytechnic Institute, 5/23-25/96.

"Network Centric Collaborative Group Computing for Teaching and Doing Physics," New York American Physical Society and American Association of Physics Teachers, Yorktown Heights, NY, 4/13/96.

"The Virtual Classroom," IDLCON '96, Washington, DC, 3/20/96.

"Studio Teaching and Interactive Distance Learning," City University of Hong Kong, 2/26/96.

"Strategies for Universities 2005," Curtin University of Technology, Perth, Australia, 2/21/96.

"Computing and Networking in the Undergraduate Physics Program: Tools for Teaching Physics," Australian Institute of Physics, Perth, Australia, 2/20/96.

"Teaching with Technology – Improving Learning Outcomes in Large Enrollment Courses," Public Lecture at Norman Dufty Lecture Theatre, Perth, Australia, 2/20/96.

"Technologies in Teaching," Workshops at Curtin University of Technology, Perth, Australia, 2/14-16/96.

"Studio Science & Engineering Courses," University of Sydney, Australia, 2/12/96.

"Re-engineering Undergraduate Education," Louisiana Board of Regents, Baton Rouge, LA, 1/26/96.

- "Teaching Introductory Physics Without Lectures: Creating Mathematical Models of Reality Using Integrated Computer Tools," The Eight Annual International Conference on Technology in Collegiate Mathematics, Houston, TX, 11/18/95.
- "Multimedia at a Distance," Creating Effective Multimedia and Assessing its Impacts Conference, Massachusetts Institute of Technology, Boston, MA, 11/9/1995.
- "Re-engineering the Undergraduate Curriculum," EDUCOM '95, Portland, OR, 11/1/95.
- "The CUPLE Physics Studio," Massachusetts Institute of Technology, 9/7/95.
- "Developing Full Curriculum Units for Higher Education Using Interactive Multimedia for the Distributed Virtual Classroom," Software Publishers Association, Boston, MA, 9/29/95.
- "Gathering and Generating Quality Content for the Digital Environment: Strategies for Success" Seminars on Academic Computing '95, Denver, CO, 8/9/95.
- "Enhancing Undergraduate Teaching and Learning Through New Technologies" Education Commission of the States, Denver, CO, 7/10/95.
- "Integrating Physics and Mechanics," ASEE Annual Conference, Anaheim, CA, 6/27/95.
- "The CUPLE Physics Studio and Studio Calculus Request for Partners," NLIJ Meeting, Denver, CO, 6/19/95.
- "Teaching Science and Mathematics in a Distributed Multimedia Learning Environment, Chautauqua Workshop, University of Pittsburgh and Rensselaer Polytechnic Institute, 6/8-10/95.
- "Reengineering the Undergraduate Curriculum: New Learning Environments for Large Introductory Courses," American Association for Higher Education (AAHE), Washington, DC, 6/13/95.
- "Integrating Advanced Function Computers and Multimedia in Undergraduate Physics Instruction," Chautauqua Workshop, Dayton, OH, 5/10-12/95.
- "The University in Transition: The Classroom," Association of American Publishers, San Francisco, CA, 5/8/95.
- "Multimedia Computing," International University Consortium Conference - Univ. of Maryland, 5/3/95.
- "A Partnership in Re-engineering: Studio Courses and Distributed Learning," National Learning Infrastructure Initiative National Meeting, New Orleans, LA, 1/23/95.
- "The CUPLE Physics Studio," Talk and Workshop, AAPT Winter Meeting, Orlando, FL, 1/15-19/95.
- "Interactive Multimedia Distance Learning Environment Developing at Rensselaer," New England Regional Computing Consortium Multi/Hypermedia SIG Conference, Mount Holyoke, South Hadley, MA, 1/6/95.
- "Re-engineering the Undergraduate Curriculum," Kanazawa Institute of Technology International Roundtable, Japan, 11/10/94.
- "Re-engineering the Large Enrollment Introductory Courses at the Universities," EDUCOM '94 Post Conference Workshop, University of Texas, San Antonio, TX, 11/4/94.
- "Using Multimedia to Re-engineer the Undergraduate Educational Experience," IBM Higher Education Conference, Boston, MA, 10/6/94.
- "The CUPLE Physics Studio," Invited Talk and Workshop, AAPT Summer Meeting, Notre Dame, IN, 8/8-13/94.

"The Use of Technology in Physics Teaching" and "Physics Curriculum," The Canadian Association of Physicists 49th Annual Congress, Regina, Saskatchewan, 6/29/94.

"Interactive Multimedia Distance Learning (IMDL): The Prototype of the Virtual Classroom," ED-MEDIA '94, Vancouver, B.C., 6/28/94.

"The Comprehensive Unified Physics Learning Environment," PROJECT IMPACT: Disseminating Innovation in Undergraduate Education Conference, sponsored by NSF, Washington, DC 5/31 - 6/4/94.

"Teaching Physics as a Second Language," Association of Research Libraries Meeting, Austin, TX, 5/18/94.

"New Directions for High School Physics," Learning Without Limits Conference, New York City, 4/22/94.

"Technology in the Classroom: How Expensive, How Effective?" Kagan Seminar on Investing in Interactive Education, New York City, 4/21/94.

"Integrating Advanced Function Computing into the Undergraduate Science Course," NSF Chautauqua Workshop Director, Univ. of Puerto Rico, Rio Piedras, 3/16-18/94 and University of Dayton, 5/11-13/94.

"Teaching and Learning" Plenary panel participant, IBM Higher Education Executive Conference, Palm Springs, CA, 2/28/94.

Invitational Conference on Reform in Mathematics and Science Education, National Science Foundation, 2/24-26/94.

New York State Advisory Council on Telecommunications, Albany, NY, 12/13/93.

"Learning and Teaching Panel" participant, IBM Leadership Exchange, Chantilly, VA, 11/18/93.

"The Multi-Media Mega-Server" COMDEX, Las Vegas, NV, 11/14-17/93.

"Designing and Developing Curriculum Innovations with Teams of Engineering Students and Faculty," Frontiers in Education Conference '93, Washington, DC, 11/8/93.

"How Interactive Technology is Restructuring Physics Education," The Jerry E. Ruckman Lecture, Dept. of Physics and Astronomy, University of Nebraska-Lincoln, 11/4/93.

National Science Foundation Mathematics Initiatives Panel Participant, NSF, Washington, DC, 10/20/93.

"Connectivity and Community: Creating a Community of Scholars in a Distributed Interactive Learning Environment," EDUCOM Conference of Educational Users of Information Technology, Snowmass, CO, 6 August 1993.

"The Comprehensive Unified Physics Learning Environment (CUPLE): Integrating Multimedia, MBL, and Computational Physics," invited workshop, Summer Meeting of the Am. Assn. of Physics Teachers, Boise, ID, 8 August 1993.

"Where We Might Go: Some Possible Futures for the Introductory Course" Conference on the Introductory Physics Course on the Occasion of the Retirement of Robert Resnick, Rensselaer Polytechnic Inst., Troy, NY, 20 May 1993.

"CUPLE: The Comprehensive Unified Physics Learning Environment," Course Director National Science Foundation Chautauqua Program, Univ. of Dayton, OH, 5-7 May 1993.

"CUPLE: A Multimedia Approach to Undergraduate Science," Teaching Through Technology, The Creative Experience, Danbury, CT, 23 April 1993.

"Improving Science Education Through Technology: Nationwide Projects," The Fourth National Conference on College Teaching and Learning, Jacksonville FL, 15 April 1993.

- "Creating and Conducting Multimedia Courses and Curricula with a Team Approach," Focus on Instruction, A Conference, Syracuse University, Syracuse, NY, 6 April 1993.
- "A Short Course of Computing in Physics Education," Workshop for North Rhine-Westphalien Universities, Soest, Germany, 25 March 1993.
- "CUPLE: The Comprehensive Unified Physics Learning Environment," Annual Meeting of the German Physical Society Section on Didactics of Physics, Fachhochschule fur Tecknik, Esslingen, Germany, 17 March 1993.
- "CUPLE: The Comprehensive Unified Physics Learning Environment," Colloquium, The University of Munich, Munich, Germany, 12 March 1993.
- "Integrating Computing Tools into Undergraduate Courses," European Group for Computers in Physics Education, Linz, Austria, 9 March 1993.
- "Designing Facilities for Interactive Learning," The Rensselaer Conference on Facilities and Interactive Learning, 18 Jan 1993.
- "The Design and Manufacturing Learning Environment," M.I.T. Colloquium, MIT, Cambridge, MA, 21 Jan 1993.
- "Microcomputer Based Laboratories: Integration, Cooperation, Standards, and Progress," NATO Advanced Study Workshop, The University of Amsterdam, The Netherlands, 12 Nov. 1992.
- "Scientific Multimedia," EDUCOM, Baltimore, MD, 29 October 1992.
- "Using Computer Based Video, Multimedia, Scientific Visualization, and Computational Physics Materials in Undergraduate Physics Courses," National Meeting of the American Association of Physics Teachers, The University of Maine, Orono, ME, 12 Aug 1992.
- "Telecommunications for Physics," National Meeting of the American Association of Physics Teachers, The University of Maine, Orono, ME, 15 Aug 1992.
- "Computer based Video in Continuing Engineering Education," Am. Soc. of Engineering Education Annual Meeting, Toledo Ohio, 22 June 1992.
- "CUPLE: Using Multimedia in Undergraduate Science," Academic Computing Conference, San Diego California, 10 June 1992.
- "The CUPLE Project," Focus On Instruction: Technology Applied to Higher Education, Syracuse University, 26 March, 1992.
- "Repurposing A Videodisc for Instruction in the Sciences," Focus On Instruction: Technology Applied to Higher Education, Syracuse University, 26 March, 1992.
- "Laboratory Data Acquisition through Computer Controlled Video," National Meeting of the Am. Assn. of Physics Teachers, Orlando, Florida, 8 January, 1992.
- "Computing in Entry Level Science Courses," Conference on Elements of Research: Increasing Student Engagement Through the Entry Level Science Course, Union College, 6 December, 1991.
- "A New Model of Sustainable Courseware," EDUCOM, San Diego California, 17 October, 1991.
- "Comprehensive Change in Introductory Physics," Conference on Computational Physics in the Undergraduate Curriculum, Davidson College, Davidson NC, 3 October, 1991.
- "Computing and Multimedia in Undergraduate Science," Conference on Multimedia in Education, Ober Lech, Austria, 5-9 August 1991.
- "The Comprehensive Unified Physics Learning Environment," Japanese Assn. of Physics Teachers, Osaka University, 29 July 1991.

- "Computers in Physics Education in the USA," US-Japan-China Fuji Conference, Susono, Japan, 24-28 July 1991.
- "The Use of the Computer in Introductory Physics Education," Conference on Introductory Physics Education in Universities, Sophia University, Tokyo, Japan, 23 July 1991.
- "The Comprehensive Unified Physics Learning Environment," Physics Computing '91: The Third International Conference on Computational Physics, 10-14 June 1991, and Bull. Am. Phys. Soc. 36 No. 7, June 1991.
- "Sophisticated Uses of Simple Computers," (with E.F. Redish), AAAS Annual Meeting, Washington, DC, 14 February 1991.
- "Multi-Media in Educational Computing in the Sciences," IBM Academic Marketing Conference, Atlanta, GA, 5 February 1991.
- "The Comprehensive Unified Learning Environment: An Attempt at the 'Grand Unification' of Programs in Computers in Physics Education," AAPT Announcer 20(1), 102(Dec. 1990), and The Annual Joint Meeting of the American Physical Society and the American Association of Physics Teachers, San Antonio, TX, 24 January 1991.
- "The Comprehensive Unified Physics Learning Environment," IBM ACIS Forum for the Physical Sciences, Miami, FL, 18 June 1990.
- "The Role of Experiment in US Laboratory Programs," Int. Conf. of Physics Education Through Experiment, Int. Comm. on Physics Education, Nankai University, Tienjin, China, 24 April 1990.
- "Multimedia and Electronic Publishing in Physics," Am. Inst. of Physics Assembly of Society Officers, Yorktown Heights, NY, 29 March 1990.
- "An Int. Space Year Space Olympiad," Int. Space Administration, Deauville, France, 14 February 1990.
- "Computers in Physics Education," Physics Department, Moscow State University, Moscow, USSR, 1 December 1990.
- "The Service Role of Mathematics from the Physics Perspective," MS2000 Conference of the National Academy of Sciences/National Research Council, 13 October 1989.
- "A Model for the Introductory Physics Course," NATO Advanced Study Workshop, University of Pavia, Italy, 3-7 October 1989.
- "The Computer in Introductory Physics," The Pew Foundation Conference on Undergraduate Teaching of Science, Hamilton College, Hamilton, NY, 12 June 1989.
- "The Computer in Introductory Physics," The Computing Officers Association, Saratoga, NY, 13 April 1989.
- "Teaching Condensed Matter Physics with Computers and Other Audiovisual Devices," Conference on the Teaching of Modern Physics, Munich, Germany, 12-16 September 1988.
- "Changing the Introductory Physics Curriculum to Prepare the Physics Student of the 1990's," Conference on Computers in Physics Instruction, Raleigh, NC, 2 August 1988.
- "Microcomputers as Learning Tools in Physics," InterAmerican Conference in Physics, Oaxtepec, Mexico, July 1987.
- "The Microcomputer in the Laboratory," ICPE meeting, Sophia University, Tokyo, Japan, August 1986.
- "The Computer in the Introductory Physics Laboratory," Int. Comm. on Physics Ed., Metropolitan University, Mexico City, Mexico, 22 January 1986.

- "The Role of the Scientific Society: The Three Audiences", Conference on Communicating Physics, International Commission on Physics Education, Duisburg, Germany, 27 August 1985.
- "National Programs to Address the Crisis in Physics Teaching", American Optical Society National Meeting, Washington, DC, 16 October 1985.
- "Federal Funding of Research and Science Education", California Section AAPT, Cal Poly, San Luis Obispo, 13 April 1985
- "The International Physics Olympiad", American Institute of Physics Meeting, Woodbury, NY, 14 March 1985.
- "Physics Education Problems and Possible Solutions Using the Computer", APS/AAPT Annual Meeting Jan 1984, and AAPT Announcer 13(4), Dec. (1983) and Bull. Am. Phys. Soc. 29(1), Jan (1984).
- "Activities in Physics Education", Am. Chem. Soc. Conference, Washington D.C., June 1984.
- "The Education of the Physicist", S.E.S.A.P.S. Memphis TN, Oct. 1984 and Bull. Am. Phys. Soc. 29(9), Nov. 1984.
- "Education Activities of Physics Societies", AIP Assembly of Society Officers New York NY, March 1984.
- "Societal Issues in Physics Courses- A Panel Discussion", J. Wilson Chair, National Science Teachers Association meeting, Boston, April 1984.

Publications:

- "*Investing in the talent and innovation future of Mass*" Op-Ed co-authored with Bill Guenther, CEO of Mass Insight; Boston Business Journal; March 20, 2015.
- "*Massachusetts' profile as an innovator could reach new levels*" Boston Globe, Jan. 26, 2015.
- "*eLearning in Engineering: The interplay of technology and pedagogy*;" ASEE-NSF-China Joint Program; ASEE/NSF Joint China-U.S. Program Article
- "*Massachusetts' profile as an innovator could reach new levels*" Boston Globe, Jan. 26, 2015.
- "*Ten IT Commandments*;" Campus Technology Magazine 2005.
- "*Is There a Future for Online Education?*" University Business Magazine; March 2003.
- "*More than Digital Content: Long Live Your Course*;" Syllabus Magazine; May 2002.
- "*The Development of the Studio Classroom*;" a chapter in Technology Enhanced Learning: Opportunities for Change; Paul S. Goodman; Lawrence Erlbaum Associates August 2001.
- "*The Technological Revolution: Reflections on the Proper Role of Technology in Higher Education*;" a chapter in In Defense of the American University; ed.: Philip G. Altbach et al.; Johns Hopkins University Press; Sept. 2001.
- "*Studio Courses: How Information Technology is Changing the Way We Teach, On Campus and Off*;" Proceedings of the IEEE, January 2000.
- "*How Information Technology is Changing the Way we Teach, On Campus and Off*;" in Les nouvelles technologies de l'information et de la communication. Proceedings of the conference in June 1998 at Ecole Polytechnique Federale de Lausanne.
- "*Gearing up for Information Technology*," Syllabus, p. 26-28, June 1998.
- "*Studio Teaching: When the Future Becomes the Present*," UniServe Science News, Vol. 7, p. 3-5, July 1997.

- "*How Computing and Communications are Changing Physics*," in *The Changing Role of Physics Departments in Modern Universities*, Proceedings of International Conference on Undergraduate Physics Education, Part One: Presentations, AIP Conference Proceedings 399, pp. 357-373, 1997.
- "*Distance Learning for Continuous Education*," International Telecommunications Update, London, 1997.
- "*Re-engineering Undergraduate Education*" in *The Learning Revolution*, Anker Publishing Co. Bolton, MA (1997).
- "*Distance Learning for Continuous Education*," International Telecommunications Update, London, 1997.
- "*Distance Learning for Continuous Education*," EDUCOM Review, Vol. 32, No. 2, pp. 12-16, March/April 1997.
- "*Virtual Classroom: Distance Learning Comes of Age*," Jack M. Wilson, Multimedia and Internet Training Newsletter 408 Brandon-Hall Publishing February 1997.
- "*Will the Ivory Tower Survive the Electronic Village?*" EDUCOM Review, Vol. 32, No. 2, pp. 12-16, March/April 1997.
- "*Expanding the Boundaries of the Virtual University*," ED, Education at a Distance, Vol. 11, No. 1, Jan. 1997.
- "*The Virtual University*," Proceedings of the International Conference of the American Society for Engineering Education, Washington DC, June 1996.
- "*A Multimedia Model for Undergraduate Education*;" R. Byron Pipes and Jack M. Wilson; Technology In Society, Pergamon - Elsevier Science Ltd; Vol. 18, No. 3, pp. 387-401, 1996.
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- "*National Issues in Engineering Education*," Proceedings of the Conference of Deans of Engineering: Re-engineering Engineering Education, p. 5-10, August 1995.
- "*The CUPLE Physics Studio*," The Physics Teacher, Vol. 32, p. 518, December 1994.
- "*Interactive Multimedia Distance Learning: The Prototype of the Virtual Classroom*," Educational Multimedia and Hypermedia 94, p563(1994).
- "*The Prototype of the Virtual Classroom*," J. M. Wilson and David N. Mosher, Journal of Instruction Delivery Systems 8(3), 28(1994).
- "*CUPLE: The Comprehensive Unified Physics Learning Environment*," Proceedings of the 1993 Spring Meeting of the German Physical Society, March 1993.
- "*Designing and Developing Curriculum Innovations with Teams of Engineering Students and Faculty*," J.M. Wilson, R. Fork and S. Sanderson, ASEE 1993 Frontiers in Education, November 1993.
- "*Student Programming in the Introductory Physics Course: M.U.P.P.E.T.*," American Journal of Physics 61(3), (March 1993).
- "*The Comprehensive Unified Physics Learning Environment: Part I. Background and System Operation*," Computers in Physics 6(2), (Mar/Apr 1992).
- "*The Comprehensive Unified Physics Learning Environment: Part II. Materials*," Computers in Physics 6(3), (May/Jun 1992).
- "*Building a Comprehensive Unified Physics Learning Environment*," J.M. Wilson, E.F. Redish, C.K. McDaniel, T.H.E. Journal, 5 (March 1992).

"*The CUPLE Project: A Hyper- and Multi-media Approach to Restructuring Physics Education*," a chapter in *Sociomedia: Multimedia, Hypermedia, and the Social Construction of Knowledge*, E. Barrett, ed., (MIT Press, Boston, MA, 1992).

"*Computer Software Has Begun to Change Physics Education*," J.M. Wilson, *Computers in Physics* 5(6), 580(Nov/Dec 1991).

"*Laboratory Data Acquisition through Computer Controlled Video*," *AAPT Announcer* 21(4), 67(Dec. 1991).

"*Education in Physics*" in *Physics News* in 1989(AIP, NY, 1989). and in *Physics Today* 43(1), Jan. (1990).

"*Using the Computer in Teaching Physics*," J.M. Wilson, *Physics Today* 42(1) (January 1989).).

"*Teaching Modern Physics: Condensed Matter: Software and Audiovisuals*" in *Proc. Conf. Teaching Modern Physics, Munich, West Germany* (World Scientific: Singapore, 1989), p 308.

"*Physics Education*" in *Physics News* in 1988, (AIP, NY, 1989). and in *Physics Today* 42(1), Jan. (1989).

"*Changing the Introductory Physics Curriculum to Prepare the Physics Student of the 1990's*," *Proceedings of the Conference on Computers in Physics Instruction*, Addison Wesley 1989.

"*The M.U.P.P.E.T. Manifesto*," W.M. MacDonald, E.F. Redish, and J.M. Wilson, *Computers in Physics* 2, July/Aug 23-30(1988).

"*Calculus for the Physical Sciences*" in *Calculus for a New Century*;" (Math. Assoc. Am., Washington, DC, 1988).

"*Physics Education*" in *Physics News* in 1987 in *Physics Today* 41(1), Jan. (1988).

"*The Microcomputer as a Laboratory Instrument*," in *Trends in Physics Education* (KTK Sci. Pub., Tokyo, 1986), p238.

"*Physics Education in Physics News in 1986*;" *Physics Today* 40(1), Jan. (1987).

"*Combining Computer Modeling with Traditional Laboratory Experiences in the Introductory Mechanics Laboratory for Physics Majors*," *AAPT Announcer* 17(2), 80(May 1987).

"*The Pride of Physics*;" Editorial in *Physics Today* 39, July 1986.

"*Physics Education in Physics News in 1985*;" : An AIP Special Report, AIP, Nov. (1985) and in *Physics Today* 39(1), Jan. (1986).

"*Teacher Institutes and Workshops*;" P. Lindenfeld and J. Wilson editors, (AAPT, College Park, MD, 1985).

"*Microcomputers in the Physics Classroom and Laboratory*", in *Proceedings of the First Asian Pacific Conference on Science Education*, (Seoul: Cultural and Social Center for the Asian and Pacific Region, 1985).

"*The Impact of the Computer on the Physics Laboratory*," in *Research on Physics Education*, (Paris: Editions du Centre National de la Recherche Scientifique 1984) 445ff.

"*The Education of the Physicist*;" J. Wilson editor, (NY: AAPT, 1984).

"*Computers in Physics*" and "*Teacher Institutes and Workshops*" in *Physics News* in 1984, *Physics Today* 35(1), Jan (1985).

"*Education in Physics*", *Physics News* in 1983, *Physics Today* 37(1), Jan.(1984) and in book form from AIP Publishing, NY (1983).

"*Places Where Things are Going Right!*", *Physics Today* 36(9), 52-60(1983).

"A Proposal to Put the Science Back in a Liberal Arts Education" J. of Col. Science Teaching 13(2) November, 69(1983).

Numerous Articles and Reports in each issue of the AAPT Announcer 1982-

"Experimental Simulation in the Modern Physics Laboratory," American Journal of Physics, 48(9), 701-704 (1980)

"Simulating Physics Experiments with the 4051," TEKniques 4, 1 (1980)

"Career Oriented Physics Courses for the Non-Science Major," The Physics Teacher, 17, 97 (1979)

"Physics with Application to Police Science," The Physics Teacher, 15, 107-108 (1977)

"The Plastic Crystal State of Ferrocene Carbaldehyde," Mol. Cryst. and Liq. Cryst., 34, 237-240 (1977)

"Physics with Application to Police Science," J. M. Wilson and C. K. Manka, Sam Houston Press (1974)

"Reinterpretation of the Fe-57 Mossbauer Effect of *l-l'* Diacetylferrocene in 4-4' Bis (heptyloxy) Azoxybenze," (with D. Uhrich), Mol. Cryst. and Liq. Cryst., 25, 113-131 (1974)

"A Mossbauer Study of a Si-119 Bearing Solute in an Ordered Smectic Liquid Crystal at 77 K," Mol. Cryst. and Liq. Cryst., 20, 349-371 (1973)

"The Use of Liquid Crystals in Mossbauer Studies and the Use of the Mossbauer Effect in Liquid Crystal Studies," with D. Uhrich, in Mossbauer Effect Methodology, Vol. 8, (NY: Plenum 1973)

"Theory of Mossbauer Spectral Asymmetry of Quadrupole Split Lines in Liquid Crystals," (With D. Uhrich), Mol. Cryst. and Liq. Cryst., 13, 85-92 (1971)

"A Mossbauer Investigation of the Smectic Liquid Crystalline State," with D. Uhrich and H. Resch, Physical Review Letters, 24, 355-359 (1970)

Book Review of "Mossbauer Spectroscopy" by G. M. Bancroft for the Journal of the American Chemical Society (1974)

"The Angular Dependence of the Mossbauer Spectrum of Sickle Cell Hemoglobin," Bull. Am. Phys. Soc., 24, 27 (1978)

"Physics in Criminal Investigation," Houston Metropolitan Science Teachers Association, September 16, 1978

"Mossbauer Spectroscopy of an Iron Carborane," Texas Academy of Science, March 21, 1975

"Mossbauer Spectroscopy of Sickle Cell Hemoglobin," Texas Academy of Science, March 21, 1975

"Physics with Application to Police Science," Texas AAPT, November 1, 1974, Texas Academy of Science, March 21, 1975, and APS-AAPT Meeting, Los Angeles, CA, February 1975

"Undergraduate Physics Education in Texas," Texas AAPT, November 1, 1974

"The Use of Liquid Crystals in Mossbauer Studies and the Use of Mossbauer Effect in Liquid Crystal Studies," 8th Mossbauer Symposium, New York (1973)

"A Mossbauer Study of a Sn-119 Bearing Solute in an Ordered Smectic Liquid Crystal Supercooled to 77 K;" Fourth International Liquid Crystal Conference, Kent, Ohio, 1972

"A Mossbauer Effect Investigation of the Liquid Crystalline State," Master's Thesis at Kent State University (1970)

"Features of Mossbauer Spectroscopy of Fe-57 Containing Solutes in Liquid Crystals," Fourth International Liquid Crystal Conf., Kent, Ohio (1972)

"*Mossbauer Spectral Asymmetry in Liquid Crystals*," (with Uhrich), Bull. Am. Phys. Soc., 16, 333 (1971)

"*Mossbauer Investigation of the Smectic Liquid Crystalline State*

Meetings, Briefings & Testimony To Government Offices

(prior to coming to UMass):

Secretary of Education, Richard Riley, February 13, 1995.

Presidential Science Advisor, Allan Bromley, November 13, 1989.

President George Bush, September 15, 1989.

Vice President Dan Quayle, June 2, 1989.

Secretary of Education: Lauro Cavazos, June 2, 1989.

Secretary of Education: William Bennett, June 1, 1988 and May 30, 1987.

Presidential Science Advisor: William Graham, June 1, 1988.

White House Office of Science and Technology, G.A. Keyworth, Director, August 19, 1985.

National Science Board Comm. on Undergraduate Science Education, Homer Neal, Chair, November 20, 1985.

House Committee on Science and Technology, Don Fuqua, Chair, July 1985.

House Committee on Education and Labor, Carl Perkins, Chair, February 1983.

Television Lectures:

"Re-engineering Distributed Learning Environments," Live Satellite Broadcast, presented by the Institute for Academic Technology, University of North Carolina, 9/29/94.

"Developing Multimedia Based Interactive Learning Materials - Part II," The Collaboration for Interactive Visual Distance Learning (CIVDL) Distinguished Lecture Series, broadcast from RSVP at Rensselaer Polytechnic Institute, 4/29/94.

"Classroom Design with Technology in Mind," a Live Satellite Broadcast, presented by the Institute for Academic Technology, University of North Carolina, 2/24/94.

"Developing Multimedia Based Interactive Learning Materials," The Collaboration for Interactive Visual Distance Learning (CIVDL) Distinguished Lecture Series, broadcast from RSVP at Rensselaer Polytechnic Institute, 11/12/93.

Invited Lectures and Colloquia:

"Issues of Technology in Higher Education," Hudson Mohawk Association of Colleges and Universities, Albany, NY, 8/20/97.

"Re-Engineering the Undergraduate Curriculum: Computing and Multimedia Enable New Learning Environments," University of New Hampshire, Durham, NH, 4/28/97.

"The CUPLE Physics Studio: An Alternative to Large Lectures," Vanderbilt University, Nashville, TN, 4/3/97.

"The CUPLE Physics Studio: An Alternative to Large Lectures," Indiana University, Indianapolis, IN, 3/5/97.

"Studio Physics," Colorado School of Mines, Denver, CO, 1/14/97.

"Experiential Learning and Multimedia: Students Learn More by Doing Than by Listening," Washington College, Washington, DC, 9/18/96.

"How Computing in Physics Has Enabled the CUPLE Physics Studio," University of Maryland, College Park, MD, 4/16/96.

"Re-Engineering the Undergraduate Curriculum: New Learning Environments for Large Enrollment Introductory Courses," Penn State, University Park, PA, 4/4/96.

"Re-Engineering the Undergraduate Curriculum: Computing and Multimedia Enable New Learning Environments," Case Western Reserve, Cleveland, OH, 3/19/96.

"Beginning Multimedia," workshop and "Teaching with Multimedia," University of Dayton, Dayton, OH, 12/6/95.

"Re-engineering the Undergraduate Curriculum: The Studio Course Model," Kansas State University, 10/16/95.

"The CUPLE Physics Studio," Talk and Workshop, Virginia Commonwealth University, 8/22-23/95.

"Re-engineering the Large Enrollment Introductory Courses," Cal Poly, 6/2/95.

"CUPLE Physics Studio: An Alternative to Large Lectures," joint APS/AAPT Meeting, Washington, DC, 4/18-21/95.

"Re-engineering the Undergraduate Curriculum: Computing and Multimedia Enable New Learning Environments," California Chancellor's Conference, Sacramento, CA, 4/6/95.

"Re-Engineering The Undergraduate Curriculum: Computing and Multimedia Enable New Learning Environments," AUPC Conference, Memorial University of Newfoundland, Canada, 2/5/95.

"Re-Engineering The Undergraduate Curriculum: Computing and Multimedia Enable New Learning Environments," McGill University, Montreal, Canada, 2/2/95.

"The CUPLE Physics Studio," US Air Force Academy, Colorado, 12/8/94.

"The CUPLE Physics Studio: Replacing the Large Enrollment Introductory Course," University of Connecticut, Storrs, CT, 12/2/94.

"The CUPLE Physics Studio: Replacing the Large Enrollment Introductory Course," Syracuse University, Syracuse, NY, 10/20/94.

"The CUPLE Physics Studio," North Carolina State University, Raleigh, NC, 9/29/94.

"Re-engineering the Large Enrollment Introductory Courses," Bureau of Engineering Teaching Seminar, University of Texas, Austin, TX, 5/17/94.

"The CUPLE Physics Studio: Re-engineering the Large Enrollment Introductory Physics Course at the Universities," Illinois Institute of Technology (IIT), 5/4/94.

"CUPLE," Creating the Virtual SUNY Campus - A SUNY FACT COCID Conference, SUNY, Albany, NY, 3/5/94.

"Interactive Learning at Rensselaer" Harvey Mudd College, Claremont, CA, 3/1/94.

"The CUPLE Physics Studio" University of Guelph, Canada, 2/1/94.

ThinkPad University Planning Session, IBM, Somers, NY 1/11/94.

"The Physics Studio - Applying CUPLE in a Studio Environment," Colloquium, Virginia Tech, 12/2/93.

"Integrating Advanced Function Computing and Multimedia into Undergraduate Science and Engineering Courses," College of Engineering Colloquium, Cornell University, Cornell, NY 11/10/93.

"CUPLE: Integrating Computing and Multimedia into Physics Instruction," A hands-on workshop for physics teachers, University of Nebraska-Lincoln, 11/6/93.

"CUPLE: The Comprehensive Unified Physics Learning Environment," Colloquium, United States Airforce Academy, Colorado Springs Colorado, 16 June 1993.

"Integrating Video Simulation and Other Sophisticated Computer Tools into Undergraduate Physics Courses," Presentation to The Summer Workshop, Dickinson College, Carlisle, PA, 11 June 1993.

"CUPLE: The Comprehensive Unified Physics Learning Environment," A Colloquium, Purdue University-Calumet, Hammond, IN, 27 April 1993.

"CUPLE: The Comprehensive Unified Physics Learning Environment," A Seminar, Center for the Development of Educational Computing and the Physics Department, Carnegie Mellon University, Pittsburgh, PA, 9 April 1993.

"CUPLE: The Comprehensive Unified Physics Learning Environment," Allegheny Community College, West Mifflin, PA, 8 April 1993.

"Multimedia in Undergraduate Science Education," A Colloquium, United State Military Academy, West Point, NY, 10 Dec 1992.

"Computer Based Video in the Sciences," Bard College, Annedale-on-Hudson, 5 Nov 1992.

"Videodiscs and Computers in Undergraduate Science," Dutchess Community College, Poughkeepsie, NY, 4 Nov 1992.

"Computing, Communications, and Computer Based Video," AT&T Bell Laboratories, Holmdel, NJ, 30 June 1992.

"Multimedia in Engineering Education," College of Engineering Colloquium, Virginia Polytechnic Institute, Blacksburg, VA, 15 June 1992.

"CUPLE: Putting it All Together," Computing in the Introductory Physics Course, Dickinson College, 18 June 1992.

"Repurposing Existing Videodiscs for Instruction in the Sciences," Academic Computing Conference, San Diego California, 11 June 1992.

"Teaching Science in the 90's: An Overview," Workshop on Science Instruction, Trinity College, 26 May, 1992.

"A Comprehensive Hypermedia Learning Environment for Physics," Mt. Holyoke College, 27 March, 1992.

"Multimedia in an Introductory Physics Course," Colloquium, New Lab for Teaching and Learning, Columbia University, Teacher's College, 10 Dec., 1991.

"CUPLE: An Illustration of Scientific Multimedia," Conference on Technology in Science, City University of New York, 9 December, 1991.

"Computing in Undergraduate Physics Courses," Colloquium, Dept. of Physics, North Carolina State University, 18 Nov. , 1991.

"Integrating Sophisticated Computing into Undergraduate Education," Colloquium, College of Engineering, The University of Cincinnati, 13 Nov. , 1991.

"Developing a Comprehensive Unified Physics Learning Environment," Colloquium, Dept. of Physics, The University of Cincinnati, 13 Nov. , 1991.

"Instructional Technology, Why and How?" Campus wide Colloquium, Clarkson University, Potsdam, NY, 22 August 1991.

"Computer Interfacing;" NY State Science Supervisor's Conference on leadership in Science Education, Russell Sage College, Troy, NY, 20 August 1991.

"CUPLE," Campus-wide Colloquium, Boston College, 9 May 1991.

"The Role of Computing in Physics Instruction," Sigma Pi Sigma Lecture, Dept. of Physics, Siena College, 25 April 1991.

- "Computing in Undergraduate Physics," Colloquium, Dept. of Physics, The University of Michigan, 18 April 1991.
- "The Comprehensive Unified Physics Learning Environment," Union College, 11 January 1991.
- "Computer Tools for Building Physics Educational Software," The Computers in Upper Level Physics Meeting, George Mason University, 12 January 1991.
- "The Comprehensive Unified Physics Learning Environment," (with E.F. Redish), IBM Corporate Executive Briefing, Thornewood, NY, 19 December 1990.
- "The Comprehensive Unified Physics Learning Environment," City University of New York Administrator's Conference, New York, NY, 9 November 1990.
- "Issues in Physics Education," Physics Colloquium, Harvard University, Boston, MA, 1 October 1990.
- "National and International Programs and Trends in Physics Education," Hawaii Teachers of Chemistry and Physics, University of Hawaii, Honolulu, HI, August 1986.
- "Energy Education and Physical Science-A Workshop," Texas AAPT, 13 November, 1982
- "The Use of Computer Graphics for Experimental Simulation in Advanced Physics Laboratories," AAPT Announcer, 11, December 1981
- "Graphic Experimental Simulation," Texas Academy of Science, Spring 1980