## IKZ Advisors, LLC

# STEM Education and Leadership

Science, Technology, Engineering, Mathematics

Boston, MA Mobile 617-642-4733

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# **EDUCATION**

Harvard University, Cambridge, MA, M.A.T. 1963, Ed. D. 1971

Cornell University, Ithaca, NY, B.A. 1960 Major: English; Minor: History

# **WORK HISTORY**

**Principal,** IKZ Advisors LLC, STEM Education and Leadership, March 2009 to present

**LEAD CONSULTANT,** Wheelock College, Aspire Institute, "Preparing PreSchool and K-3 Teachers for STEM" March 2009 to March 2010

**SENIOR FELLOW,** PK-16 STEM Initiative, University of Massachusetts President's Office and Donahue Institute, July 2006 to March 2009, **DIRECTOR CITI K-12** (Commonwealth Information Technology Initiative) July 2006 to June 30, 2007

**DIVISION DIRECTOR,** Lesley University, Cambridge, MA Technology in Education, Associate Professor, July 2000 to June 2006, **DIRECTOR OF PROFESSIONAL EDUCATION,** July 2005 to June 2006, School of Education

**SUPERINTENDENT OF SCHOOLS,** July 1993 to June 2000, Acton Public Schools, Acton-Boxborough Regional School District, MA; July 1989 to June 1993, Easton Public Schools, Easton, MA

INTERIM SUPERINTENDENT, June 1987 to June 1988, ASSOCIATE SUPERINTENDENT, July 1988 to June 1989, ASSISTANT SUPERINTENDENT, August 1982 to June 1987, Lexington Public Schools, Lexington, MA

**PRINCIPAL,** July 1974 to August 1982, Hamilton-Wenham Regional High School, So. Hamilton, MA

**ADJUNCT FACULTY**, Spring 1979 to Summer 1982, Lesley University Graduate School of Education, Cambridge, MA

**ASSISTANT PRINCIPAL,** May 1971 to June 1974, Reading Memorial High School, Reading, MA

**TEACHER OF ENGLISH, SOCIAL STUDIES, DIRECTOR OF RESEARCH IN CURRICULUM,** 1963 to 1967; 1968 to 1970, Meadowbrook Junior High School, Newton, MA

**EDITOR AND WRITER**, Housewares Review, trade publication, New York, NY 1961 to 1962

### WRITING/PUBLICATION/MEDIA IN EDUCATION

ED. D. THESIS, Harvard Graduate School of Education: **Bright Meadows**: **A Study of Teachers' Attitudes and Feelings in an Unorthodox School**, 1971.

**Differentiated Staffing**, A Profile for EDCO, 1972.

**The School Administrator as Change Agent**: One View From The Bridge. Project for the Reading Public Schools at Boston University, 1974.

**State Aid to Education**: Hamilton-Wenham's Share. A paper for Hamilton-Wenham Public Schools at Harvard Graduate School of Education, 1977.

Newsletters: **The Chalkboard** (Reading, 1971-1974); **Tales Out of School** (Hamilton-Wenham, 1976-1982); **Syllabus** (Hamilton-Wenham RHS, 1974-1982); **Newsletter** (Lexington Public Schools,1982-1985); **YES** (Your Easton Schools) 1989 to 1993; **The Lamplighter** and **Interface** (column in local paper- 1993 to 2000, Acton-Boxborough).

**Thinking Across The Curriculum,** MASCD Yearbook, 1984 (editor and contributor).

**Computers in Educational Administration,** Addison-Wesley, Reading MA 1986 (one of several authors).

**Every Child Can Learn**, MASCD Yearbook 1989 (editor and contributor).

**Your Schools In Action (YSA)**. Half hour weekly cable television show, 1983 to 2000. Wrote, directed and moderated.

**Beyond Technology: Learning With The Wired Curriculum** MASCD Yearbook 1998 (co-editor, writer) *Winner of ASCD's 1999 Annual Special Publication Award* 

**Teaching: A Career, A Profession,** MASCD Yearbook 1999 (co-editor, writer) *Winner of ASCD's 2000 Annual Special Publication Award* 

**Technology in Its Place, Successful Technology Infusion in Schools,** Jossey-Bass, 2001 (contributor)

**FOCUS, PERSPECTIVES and Speaks..**.informational publications of MASCD, regularly throughout the years; writer, editorial support, 1982 to 2012, **Several issues of Perspectives about STEM and Leadership** under my direction.

**Mission Possible: Reaching All Learners With Technology,** MASCD, Wellesley, MA Winter 2004 (co-editor, writer)

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**WINGSPREAD STRAND/CONFERENCE** (Inventing the Next Phase: T of STEM in our Schools –a strand in STEM SUMMIT II and Making MA IT Fluent, Oct. 2005, March 2006) Planner, organizer, convener, proceedings writer (http://www.lesley.edu/soe/tech\_in\_ed/wingspread.html)

One to One Campaign Tool Kit (Jan 2006) suggested to Intel, wrote and consulted with Converge Magazine on final product (<a href="http://www.best-edtech.org/">http://www.best-edtech.org/</a>)

**STEM Stimulus Package** (Summer 2008) suggested to, wrote and consulted with Converge Magazine on final product (<a href="http://media.centerdigitaled.com/">http://media.centerdigitaled.com/</a> Converge\_Mag/pdfs/issues/ConvergeSum 08\_72.pdf)

**STEM Superstars** (Winter 2009). Article for Converge Magazine, <a href="http://www.convergemag.com/stem/STEM-Superstars.html">http://www.convergemag.com/stem/STEM-Superstars.html</a>, <a href="http://www.convergemag.com/stem/Mass-Leader-Emphasizes-STEM-Education.html">http://www.convergemag.com/stem/Mass-Leader-Emphasizes-STEM-Education.html</a>

School District Instructional Technology Review, Chaired, Weston Public Schools, Jan-March 2006; Conducted, Hopedale Public Schools, August-October, 2004. Compiled/ wrote report.

**STEM SUMMIT III, IV, V,** Sturbridge MA, October 2006-08, Chair of Planning Committee (<a href="http://www.massachusetts.edu/stem/">http://www.massachusetts.edu/stem/</a>) Headed planning team for Summit VI until April 2009.

Technology Essentials for the Superintendent, MassCUE's OnCUE, Winter 2007

**Invited speaker and keynoter/panel member/presenter/convener** on topics related to leadership, instructional technology, STEM at: ISTE, MASS, MassCUE, BLC (invited), NSTA (invited) January 2009, at BETT in London, UK (invited) and in Washington, DC at NECC (invited), June 2009, Triangle Coalition in Washington, DC.

**Foundation for the Future,** A Plan for Increasing the Number of Skilled PreK-6 STEM Educators in the Greater Boston Region, The Wheelock College Aspire Institute, convened and wrote first draft of the report, May 2010. Led revision for plan 2.0, 2014.

A Strategy Guide to Digital Content, Center for Digital Education, June 2011

The Complete Step-By-Step Guide to Designing and Teaching Online Courses, with Joan Thormann, Teachers College Press, Columbia University, March 2012.

**Center for Digital Education,** Senior Fellow, June 2013 to present, <a href="https://www.centerdigitaled.com/">www.centerdigitaled.com/</a>

**Writer of numerous articles on leadership** in several publications, OnCUE (MassCUE's newsletter), MASCD Perspectives, Magna Publications, Inc (WI).

# **PROFESSIONAL ASSOCIATIONS**

Harvard Graduate School of Education Alumni Association 1976-1982 Chair 1980-1982, Associated Harvard Alumni, 1980-1982

**Harvard Graduate School of Education Principals' Center,** Founding Team Member, Member of the Advisory Board 1982-1984

**NorthEast Coalition of Educational Leaders, (**NECEL) Member, Executive Board, President, MA Affiliate, 1979-1983

Gordon College Coop Program Member of the Board of Governors, 1982-1986

**EDCO** (Educational Collaborative of Greater Boston) Program Advisory Committee, 1982-1987; 1988 to 1989; Chair 1984-1987, Board of Directors: 1987-1988, 1993 to 2000, Chair of Technology Task Force, 1994 to 2000

National Science Kids' Network, Member of the Board, 1986 -1989

**Apple User Group Advisory Committee** (UGAC) Member 1991-1994; Advisory Council, Member 1996-1998

# MASCD (Massachusetts Association for Supervision and Curriculum

**Development**) Member of the Board, 1985 to 2005, President 1987 -1990, 2000-2003, Presidents' Council (2005 to present), *Winner of ASCD's Affiliate Excellence Award*, 2006), Publications Committee and ex-officio Board member (Sept 2007 to present), Executive Director Ad Interim, October 2014 to present

**ASCD** Affiliate Advisory Committee 1989-1993 (Chair 1991-93); Strategic Planning Commission, Technology & Futures Commission, 1991-93, 1994 to 1996; Executive Council, 1993-1996; Issues Committee, Member 1996 to 1998 (Chair 1997- 1998); Local Arrangements Chair, Annual Conference, March 2001 in Boston; Ad Hoc Reception Committee, Fall 2002; K-12 Connecting With Higher Education Network Originator and Facilitator, 2001-2004

**MCET** (Massachusetts Corporation for Educational Telecommunications) Advisory Board 1991- 2000, Chair 1991-1997. Producer, host of two series: Conversations with the Secretary of Education and Conversations with the Commissioner of Education.

**M.A.S.S.** (Massachusetts Association of School Superintendents) Technology Task Force (MASSTTF), 1990 to 2000 (Founder and Chair, November 1990 to 1993); Charter School Position Paper, Lead writer, 1994

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MassCUE, Special Advisor to Board of Directors, 2012 to present

Stonehill College Superintendents' Center Board, Member 1990 to 1993

**B.E.S.T** (Business and Education for Schools and Technology) Leadership Team, 1993-2005, Co-coordinator, 2001-2005

MassNetworks Inc., Board of Directors, September 1994 to 2000

**International Electronic Journal for Leadership in Learning** (IEJLL), Advisory Board, 1996 to 2004

The Discovery Museums, Acton, MA, Board of Directors, 1998 to 2000

**Project MEET,** Advisory Board Member, MA Department of Education, Jan. 1999 to 2000

Professional Development Commission, Gov. Paul Celluci appointee, 1999

**Working Group for Educator Excellence,** member of the coalition from 2002 to present, working with the Department of Elementary and Secondary Education on educator preparation and conditions for high expectation/expertise teaching, 2009 to present; co-chair of iDEA, the subcommittee of the Leadership Team in charge of Information, Dissemination, Education and Advocacy, 2011-13, Legislation and Education Committee co-chair, May 2013 to 2014.

**METCO** Strategic Planning Advisory Committee, June 2000 to June 2001

**Youth Technology Entrepreneurs (YTE),** Advisory Committee, April 2001 to 2003

**Center for Educational Leadership with Technology** (CELT), Co-chair of Advisory Board, 2002-2004; member of the Board of Directors, November 2009 to present

MA Department of Education Working Group on Professional Development, Member 2001-2002

**Educational Technology Advisory Council** (to the Commissioner and Board of Education-ETAC), Founder and Chair, January 2000 to 2007

**Legislative Special Commission on Technology in MA Schools,** Member, Subcommittee Chair, September 2003 to May 2004

**BATEC (Boston Area Advanced Technological Education Connections) National Advisory Board member,** March 2004 to 2014

**STEM Pipeline Fund Advisory Board member**, Department of Higher Education, April 2004-2005

TTEC (Teaching with Technology Educational Consortium) Leader, September 2003-2006

CITI (Commonwealth Information Technology Initiative) Advisory Committee, December 2004-2005

Commission on MCAS Online (MA DOE), Member 2004-2006

**LIFT**<sup>2</sup>: Training Secondary Teachers in 21<sup>st</sup> Century Skills, Board of Directors, Academic Adviser, founding member, academic advisor, September 2001 to 2013

**ETLI** (Educational Technology Leadership Institute), Lesley University and Boston Public Schools. Secured private grant, supervised program, 2002 to 2005

**Watertown Public Schools,** Technology Innovative Education Advisory Council, 2006-2009

**Boston Public Schools LINC III** (Learning and Information Network for the Community) Advisory Committee, 2006-2007

Governor Deval Patrick's Readiness Project, Technology and Education Subcommittee, June 2007-June 2008

MA Secretary of Education's 21<sup>st</sup> Century Skills Task Force, 2008

**Goddard Council,** staff to Chancellor Jean MacCormack, UMass Dartmouth, 2007 to 2009

**Community/Education Outreach,** MGH Center for Community Health Improvement School Partnership Advisory Council, 2008 to 2009

MassBioEd Foundation Newsletter Editorial Board 2008 to 2010

JFY Networks, Advisory Board, April 2009 to the present

MA Governor Deval Patrick's STEM Advisory Council, December 2009 to December 2014; Operations Board, 2010 to 2014, co-leader of development of state STEM plan v 2.0; Chair of Global STEM Education Committee September 2014 to March 2015; member of subcommittees 2016

**Iowa Governor Terry Branstad's STEM Advisory Council,** August 2011 to September 2016. Chair of Global STEM Education Subcommittee, 2015

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**The <u>Kaput Center</u> for Research and Innovation on STEM Education** at UMass Dartmouth, Member of the Executive Board, 2011 to 2013

Science from Scientists, Board of Advisors, 2011 to present

Nobel Laureates, Advisory Board, 2012 to present

MEDscience, Harvard Medical School, Advisory Board, 2009 to present

**Swivet**, Advisory Board, 2010 to present

# **VOLUNTEER ORGANIZATIONS**

**Young Audiences of MA**, Board of Directors, June 2000 to June 2012; Vice President May 2002 to 2005; President July 2005 to July 2007. Member of YAI Marketing and Messaging Committee, 2010 to June 2012, Trustee Emerita, May 2016, Events Committee co-chair, January 2016 to present,

Symphony by the Sea, President, Board of Directors, 2009 to 2012

# **OTHER COMMITMENTS**

**Kenmore Tower Board of Directors,** Vice President 2008 to 2012, President 2012 to 2014

# PROJECTS CURRENTLY UNDER DEVELOPMENT/CONSIDERATION

The **Global STEM Education Center**, Developing a global STEM education program for 6-8, 9-12 and university students (<a href="http://www.globalstemcenter.org">http://www.globalstemcenter.org</a>) Chairman, Board of Directors, 2009 to present. Chair of Global STEM Education Committee, September 2015 to the present

**Search4STEM**, a one-stop portal "for all things STEM," Developer 2011-2012

### **AWARDS**

MASS President's Award, May 1995 MassCUE Pathfinder Award, June 1994

## **GRANTS**

Dozens of funded proposals since 1970; including **ETLI** (Education Technology Leadership Institute) Lesley University and Boston Public Schools— Integrating Technology into the Literacy Curriculum (\$600K over 3 years); **LIFT**<sup>2</sup>: Training Secondary Teachers in 21<sup>st</sup> Century Skills—MA DOE funding with Metro West REB—three grants of \$200K each

Reader of dozens of grant proposals to MA Department of Elementary and Secondary Education, Massachusetts STEM Pipeline Fund, Massachusetts Cultural Council

Recipient \$50K grant from Massachusetts Life Sciences Center to develop Search4STEM, Spring 2012