CURRICULUM VITA

Richard E. Biehl, Ph.D.

Instructor
Department of Industrial Engineering and Management Systems
College of Engineering & Computer Science
University of Central Florida
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Highlights

- Systems and quality engineering instructor for over 9 years
- Specialized in healthcare systems and informatics
- Information technology and quality practitioner with 39 years of experience
- Designing and building data warehouses for over 30 years
- Consulting, instructing, and mentoring independently for the past 28 years
- Taught and mentored Six Sigma projects as Black Belt for over 10 years
- Published expert in quality management, data modeling, and process analysis disciplines
- Author of numerous data, process, architecture, and quality course curriculums

EDUCATION

2008   Ph.D. in Applied Management & Decision Sciences
            Walden University
            Minneapolis, Minnesota
            Dissertation: *Interactions among process improvement, business process, and information technology process maturities in corporate information technology organizations*

1999   M.S. in Educational Change & Technology Innovation
            Walden University
            Minneapolis, Minnesota
            Thesis: *Customer-supplier analysis in educational change*

1978   B.A. in Philosophy
            Binghamton University
            Binghamton, New York

Certifications

CSSBB   Certified Six Sigma Black Belt
American Society for Quality

CSQE   Certified Software Quality Engineer
American Society for Quality

EMPLOYMENT

2009-present   UNIVERSITY OF CENTRAL FLORIDA
Industrial Engineering & Management Systems Department (IEMS)
College of Engineering & Computer Science (CECS)

2009-2015   Adjunct Instructor
2015-present Instructor
Director, M.S. in Healthcare Systems Engineering

2009-2015   Adjunct Instructor
UNIVERSITY OF CENTRAL FLORIDA
M.S. in Healthcare Informatics Program
Health Management & Informatics Department (HMI)
College of Health & Public Affairs (COPHA)

2000-2003   Adjunct Instructor
CAPELLA UNIVERSITY
M.S. in Information Technology Program
School of Business & Technology (SOBT)

1988-2009   Data & Quality Management Consultant
DATA-ORIENTED QUALITY SOLUTIONS

Committees

Advisory Council, Central Florida Health Information Technology Initiative (CFHITI),
UCF College of Medicine, Orlando, FL, 2010-2013

Management Engineering & Process Improvement Committee (ME-PI), Health Information and
Management Systems Society (HIMSS), Chicago, IL, 2010-2012

PUBLICATIONS

Books & Chapters

Talent Management for the Health IT Professional (Chapter V-5). In *The Handbook of Continuing Professional Development for the Health IT Professional*. CRC Press. Boca Raton, FL. March 2017.

Data Warehousing for Biomedical Informatics. Francis & Taylor / CRC Press. Boca Raton, FL. January 2016.

Practical Guidelines for Supertype and Subtype Modeling, in *High-Performance Web Databases, Design, Development, and Deployment*. Best Practices Series 2001 (p. 319-331), Auerbach, New York, 2001.

General Ledger as a Data Warehouse, in *Controllership: The Work of the Managerial Accountant*, John Wiley & Sons, 1997.

Data Modeling for Knowledge-Based Systems, in *Handbook of Data Management - 1994-1995 Yearbook* (Chapter VII-1), Auerbach, New York, August 1994.

Data Administration and the Malcolm Baldrige National Quality Award, in *Handbook of Data Management* (Chapter II-7), Auerbach, New York, November 1993.

Practical Guidelines for Supertype/Subtype Modeling, in *Handbook of Data Management* (Chapter V-6), Auerbach, New York, November 1993.

Peer-reviewed Journals

Casarett, D.J.; Farrington, S.; Craig, T.; Slattery, J.; Harrold, J.; Oldanie, B; Roy, J.; Biehl, R.; & Teno, J. (2012). The Art versus Science of Predicting Prognosis: Can a Prognostic Index Predict Short-Term Mortality Better than Experienced Nurses Do? *Journal of Palliative Medicine*, 15(6). 703-708.

Customer-Supplier Analysis in Educational Change, *Quality Management Journal, 7*(2), p22-39, American Society for Quality, Spring 2000.

Software quality assurance and planning for teacher and classroom. *Technology and Teacher Education Annual, 1997*. Association for the Advancement of Computing in Education (AACE), 1997.

Other Publications

Six Sigma for Software, *IEEE Software* (p68-70), IEEE Computer Society, March/April 2004.

Space Activism Matures, *AD Astra*, National Space Society, Washington DC, Sept./Oct. 1995.

Quality Assurance Theory vs. Practice, *Software Quality*, Fall 1991 (Part 1) and Winter
        1991/1992 (Part 2), Software Division, American Society for Quality Control.

Editorial Work

Practice Standard for Project Configuration Management, Project Management Institute,
        Newtown Square, PA, PSPCM Author Team, 2007.

Software Quality Professional, American Society for Quality, Associate Editor, 1997-2000

Quality Dictionary, Quality Council of Indiana, Editorial Board, 1997

Journal of the Quality Assurance Institute, Editorial Board - Book Review Editor, 1988-1994

PRESENTATIONS

Semantic Data Analysis for Interoperability.
        2017 Annual HIMSS Conference & Exhibition, Orlando, FL, USA –February 22, 2017

Innovations in Data Infrastructure. Scalable Strategies for Big Data:
        A HIMSS Virtual Briefing – June 8, 2016

Data Warehousing with Semantic Ontologies.
        2015 Annual HIMSS Conference & Exhibition, Chicago, IL, USA – April 13, 2015

36 Mistakes Six Sigma Green Belts Make and How to Avoid Them. 2015 Healthcare Systems
        Process Improvement Conference, Orlando, FL, USA – February 20, 2015

Clinical Data and Semantic Interoperability. HIMSS Central & North Florida Chapter,
        Orlando, FL, USA – November 8, 2013

Data Warehousing for Enterprise Data Management. HIMSS Central & North Florida Chapter,
        Orlando, FL, USA – November 8, 2013

Engineering Semantics into Systems. International Council for Systems Engineers, Orlando
        Chapter, Orlando, FL, USA – October 17, 2013

Systems Engineering & Big Data. IBM Rational Systems & Software Engineering Symposium, Lake Buena Vista, FL, USA – September 24, 2013

Fundamentals of Data Warehouse in Healthcare
2013 HIMSS Annual Conference, New Orleans, LA, USA – March 3, 2013

Connecting Points of Care: Leveraging EHRs to Make HIE Work (Panel)
iHT2 Health IT Summit, Fort Lauderdale, FL, USA, June 13, 2012

Implementing a Healthcare Data Warehouse in One year (Or Less)
2012 HIMSS Annual Conference, Las Vegas, NV, USA - February 23, 2012

Standardizing Data Dimensions of Healthcare Data Warehouses (Poster Session).
AMIA Now! 2010 Conference. Phoenix, AZ, USA. May 25-27, 2010

Standardizing Data Warehouse Dimensions for Bioinformatics (Poster Session).
Bio-IT World Conference and Expo 2010. Boston. MA, USA. April 20-22, 2010

Standardizing Data Dimensions of Healthcare Data Warehouses.
2010 HIMSS Annual Conference. Atlanta, GA, USA. March 3, 2010

Ontology-Based Dimensional Data Warehouse Design. 2009 OOPSLA Workshop on Ontology-Driven Software Engineering, Orlando, FL, USA. October 25, 2009

Data Quality Measurements in a Hospital Data Warehouse. 4th World Congress for Software Quality. Bethesda, Maryland, USA. September 17, 2008

Data Quality Issues in Enterprise Data Warehousing. 4th World Congress for Software Quality. Bethesda, Maryland, USA. September 15, 2008

Using Professional Certifications to Add to the Bottom-Line. Volusia Manufacturers Association. Daytona Beach, FL, USA. May 13, 2008

Adapting Six Sigma to Career Development. ASQ World Conference on Quality Improvement. Houston, FL, USA. May 7, 2008

Success by Design: Effective Data Quality Measurements in a Hospital Data Warehouse.
2008 HIMSS Annual Conference. Orlando, FL, USA. February 24, 2008

Data Quality Measurements in a Hospital Data Warehouse. ASQ International Conference on Software Quality (ICSQ07). Denver, CO, USA. October 16, 2007

Internal Certification Issues in Corporate Settings. National Organization for Competency
Assurance (NOCA). NOCA Academy. May 31, 2007

Getting People to Use Quality Tools. ASQ World Conference on Quality Improvement. Orlando,
FL, USA. May 2, 2007

Personal Six Sigma: Adapting Six Sigma to Professional Practice. 23rd Annual Pacific
Northwest Software Quality Conference. Portland, Oregon, USA. October 11, 2005

Six Sigma for Software. 14th Annual QAI International IT Quality Conference. Orlando, Florida,
USA. March 23, 2005

Six Sigma Project Types: Implications for Project Managers. PMI Central Florida Chapter
Monthly Meeting. Orlando, Florida, USA. February 1, 2005

Optimizing Quality Goals by Differentiating Six Sigma Project Types. ASQ Section 1509
Orlando Monthly Meeting. Orlando, Florida, USA. January 27, 2005

CMMI: Adapting to SEI's new Integrated CMM. 10th Annual QAI International IT Quality
Conference. Orlando, Florida, USA. April 25, 2001

Quality-Based Requirements Definition. 10th Annual QAI International IT Quality Conference.
Orlando, Florida, USA. April 24, 2001

Software Quality Assurance and Planning for Teacher and Classroom. 8th International
Conference of the Society for Information Technology and Teacher Education,
Association for the Advancement of Computing in Education. Orlando, Florida, USA.
April 4, 1997

PROFESSIONAL AFFILIATIONS

Health Information and Management Systems Society (HIMSS), Chicago, IL
Management Engineering & Process Improvement Committee, 2010-2012
Enterprise Information Systems Steering Committee, 2008-2009
Enterprise Integration Task Force, 2006-2008
IHE Special Interest Group

American Medical Informatics Association (AMIA), Bethesda, MD
People & Organizational Issues Working Group
Clinical Research Informatics Working Group
Knowledge Discovery & Data Mining Working Group

Institute of Industrial & Systems Engineering (IISE), Norcross, GA

International Council on Systems Engineering (INCOSE)
    Orlando Chapter - Membership Chair, 2010
    Orlando Healthcare Outreach Working Group, 2009-2010

American Society for Quality (ASQ), Milwaukee, WI
    Education Chairperson, Human Development & Leadership Division, 2006-2007
    Strategic Planning Chairperson, Software Division, 1997-1999
    Associate Editor, Software Quality Professional, 1997-2000

Software Engineering Institute (SEI), Pittsburgh, PA
    Invited Participant - High Maturity Practices Workshop, November 1999
    Invited Participant - CMM v2.0 Requirements Workshop, February 1995
    Review Committee - Software Engineering Capability Maturity Model v1.0

Project Management Institute (PMI), Newtown Square, PA
    Software Special Interest Group
    Configuration Management Standard Core Team Member

IEEE Computer Society, New York, NY
    Software Engineering Standards Subcommittee, 1992-2006

Computer Professionals for Social Responsibility (CPSR), Palo Alto, CA