

THOR ANDERSON, PH.D.

E-MAIL TA.ANDERSON@GMAIL.COM

5779 W. CONNOR CT. • HIGHLAND, UTAH 84003 • PHONE (801) 319-0472

CAREER SUMMARY

My career spans more than twenty years in the field of instructional technology and digital media. I have focused on finding ways to innovate and leverage technology to improve the teaching and learning experience. This focus has led me from corporate training experiences, to designing and developing eLearning specifications, to teaching and leadership positions within higher education, getting a developer bootcamp going, to my current position leading a nonprofit edtech startup.

I have sought out and focused on exciting opportunities where I could lead the development of innovative instructional materials and conduct applied research while utilizing my academic background in instructional design with my broad Internet and technology skills.

WORK EXPERIENCE



2017–Current **Learning Components Research Group** **Highland, Utah**
Executive Director

Lead in all aspects as the Executive Director of the nonprofit Learning Components Research Group. Lead the development of software that will capture learning competencies in a graph-based cloud database allowing instructors and employers to track and contribute to learning.

Provide open source software tools, libraries and services to enable educators to improve instruction and learning through great educational technology. Align competencies with emerging digital credentials and badges to build connections between student acquisition of skills and knowledge with employer expectations.



2016–2017 **Helio Training Salt Lake City, Utah** **Salt Lake City, Utah**
Director of Academics

Oversee the delivery of the Helio instructional model including staffing, teaching, metrics, evaluation, and instructor recruiting. Manage the implementation of program course scheduling including instructor schedules and balancing of instructor resources. Design and implement instructor metrics and measurements including recruiting and screening practices, training, development, and evaluation.

Serve as key contributor to the Helio leadership team and oversee curriculum development, course offerings, general staffing needs, and contribute to the Helio vision and direction. Budgetary responsibility for all academics including salaries and wages of all applicable personnel.



2005–2016 **Utah Valley University** **Orem, Utah**
Associate Dean, College of Technology and Computing

Responsibilities include leading the college's efforts in Stackable Degree programs and Competency Based Education. Coordinate grants for faculty and between colleges and assist with faculty research efforts. Interface with Concurrent Enrollment and the Career and Technical Education (CTE) programs at UVU. Oversee allocation of needed space for the college. Interact with and support the technical training needs of the local technology industry.

Digital Media Department Chair and Associate Professor

Taught courses in Rich Internet Application development, Web Languages, Multimedia and Web Essentials, Accessibility, Senior Projects, and Corporate Issues in Multimedia.

Nominated to represent UVU for two years as an Adobe Education Leader.
Served for two years as Curriculum Committee chair and two years on the RTP committee for the Digital Media department.
Joined with faculty and students in the evaluation (and future implementation) of a content management system for managing the department's websites.
Served for 5 years as the Director for the Center for Digital Design and Development in the College of Technology and Computing.
Served as Principal Investigator on a National Science Foundation Grant (\$249,514) to assist the Navajo Nation in providing IT education.
Served as Lead Instructional Designer on a Department of Labor Grant (\$671,000) focused on providing online learning for UVU's Mechatronics program.
Served for six years as UVU's representative to the IMS Global Learning Consortium.



2004–2005 **Neumont University** **South Jordan, Utah**
Senior Instructional Designer

Designed and conducted training events for the ACM's Java Engagement for Teacher Training Program.
Responsible for evaluating faculty instruction and conducting mid and end-of-quarter comprehensive student evaluations.
Responsible for instructional design support for the computer science faculty and instructors.
Conducted numerous faculty observation and evaluation sessions.



2002–2004 **SunGard Collegis** **Raleigh, North Carolina**
Senior Instructional Designer

Initiated instructional program development efforts within Collegis' Learning Technologies business unit.
Served as Co-Principal Investigator with Texas A&M University System on National Science Foundation grant #0226217 "Integrating Digital Library Resources into Online Courses"
Developed the Tpac software suite written in Java to help Texas A&M System faculty search for learning objects, add metadata, package them, and deploy them to a Learning Management System.
Led an online course development effort working with Texas A&M faculty from four different A&M System campuses. I trained the faculty in basic online learning methods, learning object design, and learning management system (WebCT) usage.



2001 **Cisco Systems** **San Jose, California**
Instructional Technology Consultant

Helped define, design, and prototype an Open Learning Component Architecture and associated tools. The project utilized open source technology based upon the J2EE architecture as well as XML for describing learning content.



1999–2002 **IMS Global Learning Consortium, Inc.** **Boston, MA**

Director of Developer Support

Developed first IMS Developer Network workshops to provide detailed instruction on the various technologies used by each specification.

Delivered first IMS Developer’s Kitchen (developer training event) to promote adoption of IMS specifications by software developers.

Director Of Specifications Development

Led the technical editing of the IMS Metadata and Content Packaging specifications. These specifications are used in many Learning Content Management System products.

- Led IMS Metadata, Content Packaging, Content Management, and Learning Design technical working groups through regular meetings and weekly conference calls.
- Represented the IMS at learning technology standards meetings and at meetings with other corporate and governmental interests.
- Helped produce 4 IMS specifications within 12 months.



1999 **Macromedia** **Redwood Shores, California**

Instructional Technology Consultant

- Designed and assisted with the development of prototype Knowledge Objects for Macromedia, Inc. These Knowledge Objects helped instructional designers develop precise learning interactions in a more efficient and effective manner than is now possible.



1998–1999 **Oracle Corporation** **Redwood Shores, California**

Senior OLA Technical Manager

- Led the effort to develop granular instructional components based upon Oracle’s Reusable Content Object strategy and supporting Oracle’s Online Learning Architecture(OLA).
- Represented Oracle at AICC, IMS, and IEEE learning technology standards meetings.
- Coordinated technical development of Oracle Learning Application compliant tools with instructional tool and content vendors.



1996–1998 **Netscape** **Mountain View, California**

Web Learning Wizard

- Responsible for the design and development of learning tools and training modules based on open, Internet technologies. These included HTML, Java, JavaScript, Dynamic HTML, Java Beans and XML.
- Worked with other Learning Tools team members to design and develop the following internet-based training modules for Netscape’s sales force:
 - SuiteSpot Intranet Sales Learning Guide
 - Messaging and Collaboration Sales Learning Guide
- Led development of component software tools written as Java Beans to provide for multiple learning experiences available from one, centralized content source. Tools were based upon Merrill’s Instructional Transaction Theory.



1995–1996 Apple Computer Cupertino, California

Senior Engineer / Instructional Designer

- Supervised all instructional materials related to OpenDoc and MacApp.
- Designed and developed the first Developer University courses available on the World Wide Web.
- Coordinated instructors and other contractors for teacher-led, classroom sessions.
- Led the development of the following Developer University online training topics:
 - System 7.5 Technologies
 - Get Started with Cyberdog Programming
 - Introduction to Component Software
 - Game Development with Sprockets
- Investigated new methods for Web-based instruction and interactive, adaptive courseware using HTML, Java and JavaScript.

1992–1995 Utah State University ID2 Research Team Logan, Utah

Research Assistant/Programmer

- Designed and programmed software tools based on Merrill's Instructional Transaction Theory. The tools were designed to support rapid construction of interactive, instructional simulations by novice instructional designers and subject matter experts.

1994 Terrel Bell & Associates Salt Lake City, Utah

Instructional Technology Consultant

- Served as a consultant on instructional technology issues to Terrel H. Bell & Associates. The goal of the HTS project was to transform M. Lynn Bennion Elementary school into a Model High-Tech School.

1993–1994 Hill Air Force Base U.S.A.F. Ogden, Utah

Instructional Designer / Programmer

Designed and programmed an interactive videodisc-based multimedia course on the air conditioning system for the C-18 aircraft using Authorware Professional. The course teaches basic air conditioning theory, repair and trouble shooting skills.

TEACHING EXPERIENCE

1988 - 1991 Brigham Young University Provo, Utah

Student Instructor for German 101 and 102. I taught for 5 semesters at BYU and also developed a HyperCard program for coordinating the weekly lesson plans for all German 101 and 102 teaching assistants.

1995 – 2004

Taught a variety of technical training sessions for Apple, Netscape, Oracle, IMS, and SunGard Collegis ranging from ½ day sessions to 5-day training sessions.

2004 Neumont University South Jordan, Utah

Taught the Basic Java technology track for 2 different Java Engagement for Teacher Training Program (JETT) events.

2005 - 2016 Utah Valley University Orem, Utah

Taught Multimedia Essentials II, Web Essentials, Rich Internet Application Development, Web Languages I and II, Web Tools and Frameworks, Accessibility for Multimedia, and Corporate Issues in Multimedia.

EDUCATION



1991 Brigham Young University Provo, Utah
B.A. German



1994 Utah State University Logan, Utah
M.S. Instructional Technology



1999 Utah State University Logan, Utah
Ph.D. Instructional Technology

Chairperson: M. David Merrill
Dissertation Title: "Rethinking Authoring Tools: A Design for Standards-Based Instructional Components"

PAPERS

Anderson, T.A. (2011, June 30). Flex Learning Components. *Adobe Developer Connection*. Retrieved from <http://www.adobe.com/devnet.html>

Anderson, T.A. (2003). I Object! Moving beyond Learning Objects to Learning Components. *Educational Technology*. 43(2), 19-24.

Anderson, T.A. and Merrill, M.D. (2000). A design for standards-based knowledge components. *Journal of Computing in Higher Education*. 11(2), 3-29.

Gibbons, A.S., Lawless, K., Anderson, T.A., & Duffin, J.R. (2000). The Web and model-centered instruction. In B. Khan (Ed.), *Web-based training*. Englewood Cliffs, NJ: Educational Technology Publications.

Beer, V. (2000). *The Web Learning Fieldbook: Using the World Wide Web to build Workplace Learning Environments*. Jossey-Bass/Pfeifer (Web Templates by Thor Anderson).

Gibbons, A.S., Fairweather, P.G., Anderson, T.A., and Merrill, M.D. (1997). Simulation and computer-based instruction: A future view. In C.R. Dills and A. Romiszowsk (Eds.), *Instructional Development: State of the Art*. Englewood Cliffs, NJ: Instructional Technology Publications.

Anderson, T.A. and Gibbons, A.S. (1995). Architecture for a tool to create model-centered instruction. Apple's East/West Authoring Tools Group CD-ROM. Apple Computer, Inc., Advanced Technology Group, Authoring Tools Program, Cupertino, CA.

Gibbons, A.S. and Anderson, T.A. (1995). Automated authoring for tutorial-based simulations. Apple's East/West Authoring Tools Group CD-ROM. Apple Computer, Inc., Advanced Technology Group, Authoring Tools Program, Cupertino, CA.

Gibbons, A.S. and Anderson, T.A. (1994). Model-centered instruction. Paper presented at the Sixth Summer Institute on Automated Design for Instructional Simulations, Utah State University, Department of Instructional Technology, Logan, UT.

Gibbons, A.S. and Anderson, T.A. (1993). Automated authoring of process simulations. Paper presented at the Fifth Summer Institute on Automated Authoring of Computer-based Instruction, Utah State University, Department of Instructional Technology, Logan, UT.

CONFERENCE PRESENTATIONS

“Proposed approach and demonstration for mapping QTI v2.1 to code for EDUPUB” EDUPUB2 Workshop on Digital Publishing for Education (February, 2014).

“Facilitated Learning Networks: How Utah Valley University is Disrupting Class” Learning Impact (May, 2011).

“Assembling Instructional Sequences using Learning Components” BYOL (Bring your own laptop) session at eLearning DevCon (July, 2009).

“Building RIAs (Rich Instructional Applications) with Flex Builder and AS3” eLearning DevCon (July, 2009).

“From Learning Objects to Learning Services” ACM Special Interest Group for Information Technology Education Annual Conference (October, 2004).

“Defining the Technical Requirements for Learning Components” Fourteenth Annual USU Instructional Technology Institute (August, 2002).

“Enterprise Application Interoperability and the IMS Specifications” Educational Technology Standards Workshop (July, 2002).

“Where’s the learning in eLearning standards?” Presentation at a conference held at Brigham Young University, 11-12 March 2002 entitled, *Online Instruction for the 21st Century: Connecting Instructional Design to International Standards for Content Reusability*.

"Fundamentals of Learning Resource Metadata" New Media Instructional Design Symposium (November, 1999).

"Designing and Developing Learning Component JavaBeans" WBT Producer '99 (April, 1999).

"Reusable Content Objects" WBT Producer '99 (April, 1999).

"Instructional Components Based on Internet Standards" Online Learning '98 (September 1998).

"Instructional Components based on Internet Standards and Transaction Theory" Tenth Annual USU Instructional Technology Institute (September 1998).

TECHNOLOGY EXPERIENCE

Operating Systems: Macintosh, Windows 95/98, Windows NT/2000/XP, SuSE Linux, Mac OS X

Programming Languages: Java, JavaScript, ActionScript, PHP

Internet: HTML5, XML, CSS, AngularJS, jQuery, SVG, Flex Framework, Subversion, Git, NoSQL databases, Web Components, React

eLearning Specifications/Standards: IMS Learning Resource Metadata, IMS Content Packaging, IMS Questions and Test Interoperability, IMS Learning Design, IEEE Learning Object Metadata, Dublin Core, OAI-PMH, IMS Common Cartridge, IMS Learning Tool Interoperability

INTERESTS

Internet technologies, Authoring tools, Computers, Automobile restoration, Camping

RECOGNITION

Leadership Award winner for "Learning Components and Utah Valley University". Learning Impact 2011

Utah State University Department of Instructional Technology Distinguished Alumni Award for 2002

Certificate of Appreciation for participation in the 2003 Salt Lake Community College Faculty Convention

Certificate of Recognition for JETT (Java Engagement for Teacher Training) by The College Board and ACM.