RICHARD SWAN

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EDUCATION

Ph.D., Instructional Psychology & Technology, 2008
Brigham Young University, Provo, UT
Dissertation: *Deriving Operational Principles for the Design of Engaging Learning Experiences.*

M.S., Instructional Psychology & Technology, 2003
Brigham Young University, Provo, UT
Thesis: *The Interaction of Brain Process Preference with Structuredness of Problem Solving Situations in a Computer-Simulated Chemistry Laboratory.*

B.A., Film Studies, 1988
University of Utah, Salt Lake City, UT
Phi Kappa Phi Honor Society
Golden Key Honor Society

WORK EXPERIENCE

Associate Director 2014 to present
Center for Teaching and Learning, BYU

General Duties: Supervise Teaching & Learning Consultants. Assist with planning and budgeting for the Center. Plan and implement faculty development programs.

Accomplishments and Service:

- Liaison with Faculty Center. Collaborated with personnel in the Faculty Center on recommending revisions to peer review of teaching, on seminars and workshops including the New Faculty Spring Seminar.

Teaching and Learning Consultant 2006 to 2104

Center for Teaching and Learning, BYU

General Duties: Consult with colleges, departments and individual faculty to redesign courses, coach faculty on teaching practices, and help integrate technology to emphasize a more active learning approach. Help programs and faculty with learning outcomes and learning outcomes assessment. Represent Independent Study (IS) to departments and faculty. Negotiate IS contracts and handle issues of non-compliance.

Accomplishments and Service:

- Freshman Academy Advisory Group. Served as a member of the advisory group for Freshman Academy (a program for entering freshmen). Also served as a member of the Faculty Development subcommittee.
- Biology 100 Learning Outcomes Committee & Course Redesign. Invited to serve on the committee to draft learning outcomes for Biology 100. (The Biology department was asked to review and improve Biology 100 by the Faculty General Education Council. Student ratings have improved on key items.)

Instructional Design Architect 1999 to 2006

Center for Instructional Design, BYU

General Duties: Work with faculty to diagnose instructional problems and to design instructional and technological solutions. Work with production team to specify and produce instructional materials. Mentor and supervise instructional design interns.

Accomplishments and Service:

- Instructional Media Projects Coordinator. Established processes for proposing and approving instructional media project ideas originating from faculty. Oversaw the design and development of approved projects.
- Committee for Instructional and Media Arts. Served as an administrative member of this committee which review and approved institutionally funded instructional and media development projects.

Instructional Designer 1995 to 1999

Instructional Technology Center, Brigham Young University

General Duties: Work with faculty to solve instructional problems in a variety of capacities including instructional design, project management, programming and program design, interface design, script writing and video production. Hire and supervise student employees.

Accomplishments and Service:

- Acting Business Manager. Served as the acting business manager in addition to regular duties from December of 1998 until the formation of the Center for Instructional Design in April 1999. Was specifically charged with recommending and implementing new accounting, billing, and project management processes and systems.
- Content Management and Production Committee Member. Served as the ITC's representative on this university committee from September 1998 to April 1999. This committee was formed to review the university's instructional design, and media production organizations, and to recommend changes that would make more effective use of these resources. Resulted in the new Center for Instructional Design.

Systems Manager 1992 to 1995

Cable Plus, Bellevue, WA

General Duties: Manage all aspects of a 60-user local area network. Hire, train, and supervise support personnel. Establish hardware and software purchasing standards. Provide user support and training. Program databases, and automated templates.

Accomplishments and Service:

- Helped plan and implement an improved system for routing service calls to technicians reducing the labor required from 10+ hours to approximately 6 hours.
- Conducted systems and task analysis and prepared a two-year plan for communications infrastructure to link seven departments in anticipation of company's projected 200% growth.
- With the infrastructure project approximately 60% complete as of June 1995, the systems department budget showed a savings of $7,000.

Systems Manager 1988 to 1992

Adams & Associates, Inc., Seattle, WA

General Duties: Manage local area network of corporate headquarters and wide area network for five branch offices. Oversee installation, configuration, and maintenance of personal computers and related equipment. Specify and purchase hardware, software, and peripherals. Provide training and support to computer users.

Accomplishments and Service:

- Served as a member of the company's Computer Migration Task Force to plan and implement the migration from a paper-based system to a network-based system.
- Authored the technology section and edited the Temporary Division's *Temporary Services Training Manual*. Served as editor of the *Personnel Services Owners' Guide* published by the National Association of Personnel Services.

INSTRUCTIONAL SOFTWARE PUBLICATIONS

Virtual ChemLab: General Chemistry Laboratory Simulations.
Publisher: Pearson Prentice-Hall.
Role: Instructional Designer.
Includes: Calorimetry; Fundamental Experiments in Quantum Chemistry; Gas Laws; Inorganic Qualitative Analysis; and Titrations.

Virtual ChemLab: Organic Synthesis and Qualitative Analysis.
Publisher: Pearson Prentice-Hall.
Role: Instructional Designer.

Virtual Physics Lab.
Publisher: Pearson Prentice-Hall.
Role: Instructional Design Consultant.

Virtual Physical Science.
Publisher: Pearson Prentice-Hall.
Role: Instructional Design Consultant.

Petroglyph (a petrographic microscope simulation).
Publisher: Blackwell Science.
Role: Programmer, Quality Assurance.

Encyclopedia of Nursing Skills, Vols. 1-5.
Publisher: Concept Media.
Role: Instructional Designer, Programmer, Quality Assurance.
Includes: Techniques of Drug Administration; Vital Signs, Assessment, and Screening; Sterile Techniques; Hygiene and Mobility; and Tubes Management.

Post-Operative Care.
Publisher: Concept Media.
Role: Instructional Designer, Programmer, Quality Assurance.

ACADEMIC PUBLICATIONS

Computer-based Laboratory Simulations for the New Digital Learning Environments.
Webb, J., Woodfield, B. F., & Swan, R. H. (In Press). In "Teaching Science Online: Practical Guidance for Effective Instruction and Lab Work." D. Kennepohl (Ed.), Stylus Publishing, LLC.

Feedforward as an Essential Active Principle of Engagement in Computer Games.
Swan, R. H. (2010) in "Gaming and Cognition: Theories and Practice from the Learning Sciences." R. Van Eck, ed., IGI Global.

Interdisciplinary Approaches to Serious Games: Emerging Concepts, Theory, and Future Directions.
Adcock, A. B., Malliet, S., Swan, R.H., Watson, G., and Van Eck, R. (2010). Proceedings of Inter-Disciplinary.Net: Videogame Cultures.

Reexamining the Implied Role of the Designer.
Gibbons, A. S., Merrill, P. F., Swan, R., Campbell, J. O., Christensen, E., Insalaco, M., & Wilcken, W. (2008). The Quarterly Review of Distance Education.

Design Structures for Intrinsic Motivation.
Swan, R.H. (2005). Proceedings of the Interservice/Industry Training, Simulations, and Education Conference.

Help: Toward a New Ethics-Centered Paradigm for Instructional Design and Technology.
Inouye, D.K., Merrill, P.F., Swan, R.H. (2005). IDT Record

The Virtual ChemLab project: A realistic and sophisticated simulation of organic synthesis and organic qualitative analysis.
Woodfield, B.F., Waddoups, G.L., Moore, M.S., Swan, R., Allen, R., & Bodily, G. (2005). Journal of Chemical Education, v82 n11.

The Virtual ChemLab project: A realistic and sophisticated simulation of inorganic qualitative analysis. Woodfield, B.F., Waddoups, G.L., Moore, M.S., Catlin, H.R., Swan, R., Allen, R., & Bodily, G. (2004). Journal of Chemical Education, v81 n11.

CONFERENCE PRESENTATIONS

Introduction to Decision-based Learning.
Swan, R.H. Plummer, K, Fisher, L. (2015) POD Network Annual Conference, San Francisco, CA.

Decision-based Learning
Plummer, K, Swan, R.H., Johnson, M., (2015) Poster for the Teaching Professor Technology Conference, New Orleans, LA.

Finding a Focus: The Power of a Concise Course or Project Purpose.
Swan, R.H. Plummer, K, Johnson, M., Eliason, S.E., & Arts-Johnstun, C. (2015) Instructional Design & Learning Community Conference, Salt Lake City, UT.

Leveraging Course Purpose to Facilitate Faculty Shift to the Learning Paradigm.
Swan, R.H. Plummer, K, Johnson, M., Eliason, S.E., & Arts-Johnstun, C. (2014) POD Network Annual Conference, Dallas, TX.

Decision-based Learning: An Introduction.
Plummer, K. & Swan, R.H., (2015) Instructional Design & Learning Community Conference, Salt Lake City, UT.

A SoTL Approach to Learning-Centered Peer Review of Teaching for Tenure and Promotion.
Swan, R. H. & Johnson, T. (2103) The SoTL Commons: A Conference for the Scholarship of Teaching & Learning, Savannah, GA.

Learning Outcomes Assessment and Learning-Centered Peer Review of Teaching: A Reciprocal Relationship.
Swan, R.H. & Johnson, T. (2013) Texas A&M Assessment Conference, College Station, TX.

An Integrated Approach to Program Assessment of Learning Outcomes.
Swan, R.H. & Johnson, T. (2011) POD Network Annual Conference, Atlanta, GA

Peer Review of Teaching: A Learning-centered Approach.
Johnson, T. & Swan, R.H. (2011) POD Network Annual Conference, Atlanta, GA

Agentive Valuation and Successful Technology Integration.
Swan, R.H., Majors, Anneke. (2010) Teaching with Technology Idea Exchange, Salt Lake City, UT.

The Intersection of Systems Theory, Psychology, Physiology, and Agency in Educational Computer Games.
Swan, R.H. (2010) Inter-Disciplinary.Net: Videogame Cultures, Oxford, UK.

Interdisciplinary Approaches to Serious Games: Emerging Concepts, Theory, and Future Directions.

Adcock, A. B., Steven Malliet, Richard Swan, Ginger Watson, and Richard Van Eck (2010) Inter-Disciplinary.Net: Videogame Cultures, Oxford, UK.

Overcoming Faculty Resistance to Teaching Personal and Social Responsibility.

Swan, R.H. (2009) The Association of American Colleges & Universities' Annual Conference.

Feedforward: A Multi-Disciplinary Explanation of Engagement in Computer Games.

Swan, R.H. (2009) Association for Educational Communications and Technology (AECT) Annual Convention. Louisville, Kentucky.

Using Challenge-driven Instructional Design to Increase Engagement in General Education.

Swan, R.H., Burdett, S., Cates, R., Smith, S., Dye, B. (2007). Annual conference of the Association for Educational Communications and Technology.

Don't Forget the Human Factor: Psychological Principles that Fuel the Success of Computer Games and Inductive Teaching Methods.

Swan, R.H. (2007). Teaching with Technology Idea Exchange, Orem, UT.

Two-Triangular Change: The Redesign of Biology 100 at BYU.

Swan, R.H., Burdett, S., Smith, S., Dye, B. (2006). E-Learn 2006, sponsored by the Association for the Advancement of Computers in Education.

Developing Students' Intellectual Capacity in Biology 100.

Swan, R.H., Burdett, S., Cates, R. (2006). Poster for the annual meeting of Science Education for New Civic Engagement and Responsibility (SENCER), San Jose, CA.

Design Structures for Intrinsic Motivation.

Swan, R.H. (2005). Interservice/Industry Training, Simulations, and Education Conference, Orlando, FL.

Is Engagement Enough?

Swan, R.H. (2005). Teaching with Technology Idea Exchange, Utah Valley State College, Orem, UT.

Help: Toward a New Ethics-Centered Paradigm for Instructional Design and Technology.

Inouye, D.K., Merrill, P.F., Swan, R.H. (2003). Annual conference of the Association for Educational Communications and Technology.

Using Design Principles from Computer Games and Other Entertainment Forms.

Swan, R.H., (2003). Annual conference of the Association for Educational Communications and Technology.

Using Computer Simulations to Assess Higher-order Cognitive Skills.

Swan, R.H., Woodfield, B.F., Waddoups, G.L. (2000). Annual conference of the Association for Educational Communications and Technology.

INVITED PRESENTATIONS

Crossroads of Teaching & Learning.
Swan, R.H. (2011) American Optometric Association Annual Conference, Salt Lake City, UT

Promoting Active Learning.
Swan, R.H., Taylor, J., Davis, S., Fox, J. (2007). New Faculty Seminar, Brigham Young University, Provo, UT.

Is Engagement Enough?
Swan, R.H. (2005). Invited presentation at the annual conference of the Utah Association for Adult, Community, and Continuing Education, Ogden, UT.

Toward Agentive Learning: Designing Motivating Learning.
Swan, R.H. (2005). Faculty Fellowship, Brigham Young University, Provo, UT.

What About the Carrot?
Swan, R.H. (2004). Invited presentation at Loyola Marymount University, Los Angeles, CA.

Motivating Learning by Design.
Swan, R.H. (2004). Teaching & Learning with Technology Fellowship, Brigham Young University, Provo, UT.

TEACHING

Instructional Psychology & Technology 692R: Foundations of Games in Education

Biology 100: Principles of Biology

Instructional Psychology & Technology 620: Learning Theory

Theater and Media Arts 384R: Programming in Authorware.

Training Seminars: Video Editing with Adobe Premiere

GRANTS & OTHER AWARDS

Employee of the Year - Center for Instructional Design, 1999.

Realistic Simulations of Instructional Chemistry Laboratories.
2000-2003: Fund for the Improvement of Post-Secondary Education Grant, U.S. Department of Education

Top 100 Media Producer, *A/V Video Multimedia Producer Magazine*, 2002.

Chemistry 105 for Semester Online.
2004-2005: Institutional grant for the redesign of Chemistry 105

Honorable Mention, Best Paper (*Design Structures for Intrinsic Motivation*) – Education Division, Interservice/Industry Training, Simulations, and Education Conference, 2005.

Pirelli International Award – *Virtual ChemLab*, 2008

Campus Technology Innovator's Award – Learning Outcomes website, 2011