

# David Hatfield

2134 Center Ave, Madison, WI 53706 • 608.219.5748

dlhatfield@gmail.com

---

## EDUCATION

### *University of Wisconsin - Madison*

Ph.D. in Educational Psychology, Learning Sciences area

2011

M.S. in Educational Psychology, Learning Sciences area

2006

### *North Carolina State University*

M.A. in English Literature (ABD)

1996

### *Virginia Polytechnic Institute and State University*

B.S. in Biology, Aquatic and terrestrial ecology focus

1993

## APPOINTMENTS AND EXPERIENCE

### **Technical Director**, *Wisconsin Center for Educational Research*

2010-present

Epistemic Games research group

Develop, manage and support complex database-driven web applications using object-oriented design principles for educational research projects. Administer web application and database servers. Design and evaluate data gathering and analysis tools to support the assessment and development of educational games.

### **Researcher**, *Epistemic Games research group*

2003-present

Science.net, journalism game project

Lead researcher responsible for subject recruitment, IRB protocol approval, multi-stage data collection and analysis, supervision of research staff, and collaboration with outside institutions.

### **Project Assistant**, *Wisconsin Center for Educational Research*

2009-2010

Automentor: virtual mentoring and assessment in computer games for stem learning (NSF Grant)

Assist in the design and development of professional practice simulation for epistemic games. Assist in the design and development of epistemic network analysis methodology used with data from epistemic games and other learning environments. Collaborate with teams from partner institutions. Particular projects include development of multidimensional analysis scripts in, R and PHP and using client-based and web-based approaches to provide epistemic network analysis for various data sets.

### **Project Assistant**, *Wisconsin Center for Educational Research*

2008-2009, 2004-2007

Alternative Routes to Science and Technology (NSF Grant)

Assist with development and maintenance of technical infrastructure for learning sciences research projects investigating using professional communities of practice as alternative models for developing scientific and technological literacies.

<p><b><u>Teaching Assistant</u></b>, <i>Educational Psychology Dept., University of Wisconsin-Madison</i>          Introduction to the Learning Sciences 795 &amp; 796 (Graduate Courses)          Assist with course preparation and work with students on weekly assignments and research projects.</p>	2007-2008
<p><b><u>Project Assistant</u></b>, <i>Wisconsin Center for Educational Research</i>          Center for the Integration of Research, Teaching and Learning (NSF Grant)          Assist with development and instruction of experimental course for Science, Technology, Engineering, and Math graduate students and faculty on Instructional Materials Development. Coordinate brownbag series on Instructional Materials Development.</p>	2003-2004
<p><b><u>Assistant Director</u></b>, <i>Academic Advanced Distributed Learning Co-lab</i>          Manage applied research and demonstration projects related to computer software and hardware tools for distributed learning; promote ongoing development and adoption of eLearning standards; investigate pedagogical issues related to eLearning standards.</p>	2002-2003
<p><b><u>Lead Consultant</u></b>, <i>Berbee Information Systems</i>          eLearning Practice          Established new business line within company involving budget development / management, cross-team coordination, operational and sales process development; Learning management system, web-conferencing and team collaboration implementations for corporate customers; AICC/SCORM content integration consulting, workshops and presentations for corporate training departments and content vendors.</p>	2000-2002
<p><b><u>Web Services Director</u></b>, <i>University of Wisconsin Learning Innovations (UWLI)</i>  <b><u>Technical Architect</u></b>  <b><u>Instructional Designer</u></b>          Lead small development team on personalized portal project to centralize access to UW System on-line courses for students; Technical architect for revision to Flexible Learning correspondence course web application, and original technical design for High School Equivalency project for American Council of Education; Instructional designer for corporate training projects and full-credit web-based UW Colleges academic courses. Academic work also involved coordination with multiple campuses, and faculty development.</p>	1997-2000
<p><b><u>Network &amp; Systems Admin</u></b>, <i>Reed Sendecke Inc.</i>  <b><u>Web &amp; Multimedia Developer</u></b>          Learned advertising agency approach to on-time/on-budget projects working specifically on corporate web sites and multimedia cd-roms; Responsible for company internal network, external connectivity to Internet, and systems (wide range of Mac and PC workstations, printers, scanners).</p>	1996-1997
<p><b><u>Graduate Instructor</u></b>, <i>Department of English Literature, North Carolina State University</i>          Taught multiple sections of Freshman English Composition in computer-assisted classrooms with full responsibility for curriculum design and delivery; Led faculty development workshops on various applications and Internet resources; Assisted with departmental web site and network administration.</p>	1994-1996

## EPISTEMIC GAME DEVELOPMENT

*Land Science* (2010, 2011)

*Urban Science* (2007, 2008, 2009)

In the *Land Science* and *Urban Science* games, players become interns at a fictitious urban planning firm, Land Management Associates. Players weigh the trade-offs of land use decisions in ecologically-sensitive areas, interact with virtual stakeholders and use iPlan, a custom-designed Geographic Information System, to develop land use plans for local and national sites.

*Nephrotex* (2010, 2011)

In the *Nephrotex* game, undergraduate engineering students role-play as early career hires at the fictitious company Nephrotex, and design a next-generation ultrafiltration unit, or dialyzer, for a hemodialysis machine. Through the game, players gain valuable experience with the complexity of engineering design.

*Science.net* (2005, 2006)

*South Madison Times* (2004)

*Wisconsin Science Journal* (2003)

*Neighborhood.net* (2002)

Combining the excitement of local stories with the thrill of publishing their own work to inform the public, young players in the *Science.net* series of journalism games work as reporters publishing an online newsmagazine on important socioscientific and community-based topics. During the game, players work with professional journalists, learning skills like interviewing and copyediting. And they use these skills right away, working on and publishing stories that matter. By playing these games, players learn about the diversity of life around them, develop an awareness of the relevance of community happenings, discover local scientific issues, and begin to see the world as journalists.

*Legislative Aide* (2009)

*Legislative Aide* is designed to help students in exploring their community, its resources, and their role in civic life. During the game, students work in small groups taking up the role of legislative aides to a simulated elected official. Players conduct one-on-one interviews with real-life members of their community, and then use Youth Map, an innovative social network mapping tool, to see how resources and information are linked within the community.

## PUBLICATIONS & PRESENTATIONS

Newsgames workshop (2011). Minnesota Journalism Center, University of Minnesota.

MacArthur 21st Century Assessment team meeting. (2010). Macarthur foundation, Arizona.

Hatfield, D., & Shaffer, D.W. (2010) The epistemography of Journalism 335: Complexity in developing journalistic expertise. International Conference of the Learning Sciences (ICLS), Chicago.

Hatfield, D. (July, 2010). Designing epistemic games. Wisconsin Center for Academically Talented Youth (WCATY) presentation. Madison, WI.

Shaffer, D.W., Hatfield, D., Svarovsky, G.N., Nash, P., Nulty, A., Bagley, E., Franke, K., Rupp, A.A., Mislevy, R. (2009). Epistemic Network Analysis: A prototype for 21st Century assessment of learning. *The International Journal of Learning and Media*.

Hatfield, D. (July, 2009). Designing epistemic games. Wisconsin Center for Academically Talented Youth (WCATY) presentation. Madison, WI.

Hatfield, D., & Shaffer, D. W. (June, 2008). Reflection in professional play. International Conference of the Learning Sciences (ICLS), Utrecht, Amsterdam.

Hatfield, D., & Shaffer, D. W. (March, 2008). 'Experiencing it first-hand': epistemic games and game engines. Paper to be presented at the American Educational Research Association conference (AERA), New York.

Hatfield, D. (February, 2008). 'Experiencing it first-hand': designing epistemic game engines. Wisconsin Spencer Doctoral Research Program Lecture series, Madison, WI.

Hatfield, D., & Shaffer, D. W. (July, 2007). Professional practice simulation with epistemic games. Digital Learning and Collaboration II, Singapore Learning Sciences Laboratory, Singapore.

Hatfield, D., & Shaffer, D. W. (March, 2007). *Epistemic game engines*. DIGITEL 2007 IEEE International Workshop on Digital Game and Intelligent Toy Enhanced Learning, National Central University, Chungli, Taiwan.

Hatfield, D., & Shaffer, D. W. (July, 2006). *Press play: designing an epistemic game engine for journalism*. Paper presented at the International Conference of the Learning Sciences (ICLS), Bloomington, IN.

Hatfield, D. (June, 2006). "Epistemic Game Engines." With Alecia Magnifico, David Williamson Shaffer, Gina Svarovsky, and Elizabeth Sowatzke. *Games+Learning+Society* 2.0. University of Wisconsin-Madison.

Hatfield, D. (June, 2005). "byline: epistemic game engine for science literacy." *Games+Learning+Society* 1.0. University of Wisconsin-Madison.

Hatfield, D. (May, 2004). "Improving Literacy in Research, Teaching, and Learning: The Experiences of Delta Program Participants." (Instructional materials development presentation). 2004 Annual Teaching and Learning Symposium. University of Wisconsin-Madison.

Hatfield, D. (October, 2003). "Fletch: Web-based Journalism as a Bridge to Technological Literacy." 2003 IEEE Symposia on Human Centric Computing Languages and Environments. University of Auckland, New Zealand.

Hatfield, D. (May, 1996). "Martian Odysseys Past and Present: American Science Fiction and the Colonial Contact Zone." Science Fiction Research Association. University of Wisconsin--Eau Claire.

Hatfield, D. (March, 1996). "Seeing Colonialism Through the Mind's Eye." International Association of the Fantastic in the Arts. Florida Atlantic University.

Hatfield, D. (October, 1995). "The Dunciad Variorum as Hypertext." Midwest American Society for Eighteenth-Century Studies. University of Minnesota.

Hatfield, D. (October, 1994). "Virtual Voodoo and Cyberpunk Science Fiction." Popular Culture Association in the South. Georgia Southern University.

**MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS**

American Educational Research Association (AERA)

International Society of the Learning Sciences (ISLS)

Institute of Electrical and Electronics Engineers, Computer Society (IEEE)

**AWARDS AND HONORS**

Spencer Doctoral Research Program and Fellowship

UW Graduate Student Collective - Graduate Student Peer Mentor Award