

# CURRICULUM VITAE

## David E. Hailey, Ph.D.

Associate Professor—Professional and Technical Communication  
Department of English, Utah State University, Logan, UT 84322  
435 797 2741 dhailey@english.usu.edu  
[HTTP://imrl.usu.edu/hailey/](http://imrl.usu.edu/hailey/)

### *EDUCATION*

- Ph.D.**            **University of New Mexico:** Language and Rhetoric, Theory of Criticism.  
DISSERTATION: *The Objective Metaphor: An Examination of Objects as Metaphors and Metaphors as Objects*; 1994.
- MA**             **University of New Mexico:** Professional/Technical Writing.  
THESIS: *Cacophonies*; a collection of creative-nonfiction works, 1990.
- BA**             **University of Puget Sound:** Art -- Creative Writing, Fine Art, 1974.
- AAS**            **Tacoma Community College:** Natural Sciences, 1972.

### *TEACHING EXPERIENCE*

- Associate Professor, Department of English**  
Utah State University, 2000—present.
- Principal Director, Interactive Media Research Laboratory**  
Utah State University, 2000—present.
- Assistant Professor, Department of English**  
Utah State University 1994—2000.
- Head of Research, Center for Asynchronous Learning**  
Utah State University 1996—2000.
- Instructor, Humanities Department**  
Albuquerque Technical-Vocational Institute 1993—1994.
- TA, Department of English Language and Literature,**  
University of New Mexico, Albuquerque, NM 1989—1994.

- |                               |                                      |                                       |
|-------------------------------|--------------------------------------|---------------------------------------|
| <b>Courses<br/>Developed:</b> | Visual Design for Major Publications | Visual Design for Online Publications |
|                               | Introduction to Multimedia*          | Advanced Multimedia*                  |
|                               | Publications Management              | Help File Authoring*                  |
|                               | Technology and the Writer*           | English 101*                          |
|                               | Document Design Workshop*            | Intranet Management*                  |
|                               | Help File Theory*                    | Internet Management*                  |
|                               | Native American Lit*                 | VR as A Communications Tool           |

(\* courses also taught online.)

## **RESEARCH**

### **BLIND REVIEWED JOURNAL ARTICLES**

- "How Genre Choices Effect Learning in a Digital Environment."** *Journal of Engineering Education*, October 2003 (With C.E. Hailey). (Cited in peer reviewed articles and available in scholarly download libraries.)
- "Thermodynamic Cycles: A Multimedia, Independent Study Course."** *Computers in Education Journal*, November 2002 (with C.E. Hailey).
- "Online Education Horror Stories Worthy of Halloween."** Special issue of *Computers and Composition*, Winter 2001 (with K. Grant-Davie and C. Hult).
- "Virtual English at USU: a Five Year Journey."** *Computers and Composition Online*, Spring 2000 (with Christine Hult).
- "Evaluation of Instructional Design of Computer-Based Teaching Modules for a Manufacturing Processes Laboratory."** *Journal of Engineering Education*, June 2000 (with C.E. Hailey).
- "Hypermedia, Multimedia, and Reader Cognition: An Empirical Study."** *Technical Communication: Journal for the Society of Technical Communication*. vol 45/3, Summer 1998, 330-42 (with C.E. Hailey).
- "The Heuristic Value of the Help File: Combining Rhetorical Frameworks with Technical Skills to Teach Help File Authoring."** *Computers and Composition*, vol 14/3, Spring 1998, 429-44.
- "Examining Industry Needs and Building a Multimedia Technical Writing Program to Match."** *Text Technology*, 3-29, Winter 1997.
- "The Visual Elegance of Silko's Ceremony."** *Wakasa Za Review*. Eastern Washington State College Press, Spring 1990, 1-6.

### **BLIND REVIEWED PROCEEDINGS ARTICLES**

- "A Next Generation of Digital Genres: Expanding Documentation into Animation and Virtual Reality."** *Proceedings of the 22nd Annual International Conference on Design of Communication*, Memphis, October 2004. (In 2005 this rose to 3d most downloaded article in the Association for Computer Machines digital library.)
- "Genre Theory, Engineering Education, and Circumventing Internet Bandwidth Problems."** *Proceedings from the 2002 IEEE/ASEE Conference*, Boston, November 2002 (with C.E. Hailey).
- "Genre Theory, Technology, and Knowledge Distribution."** *Proceedings of the 2002 IPCC Conference*, Portland, September 2002 (with C.E. Hailey).
- "Overview of a Distributed-Hard-Drive-Based Educational Plan."** *Proceedings of the 2002 ASEE Gulf-Southwest Annual Conference*, The University of Louisiana at Lafayette, March 2002 (with C.E. Hailey).
- "Preserving Important Processes Before They Are Lost."** *Proceedings of 2001 Annual Conference of the American Institute of Aeronautics and Astronautics*, May 2001.
- "A Case for Monster Media."** *Proceedings for the Annual IEEE/SIG-DOC Conference*, Autumn 2000.
- "Evaluation of Student Preferences and Learning Outcomes of Computer Based Teaching for a Manufacturing Processes Laboratory."** *Proceedings of the Annual Conference and Exposition of the American Society for Engineering Education*, July 1998, 1-14 (with C.E. Hailey).

## ARTICLES AND BOOKS IN PROGRESS OR REVIEW

**“Impact of Innovation on Writing in the Creative Economy”** Approved pending rewrite for *Technical Communication*, the journal for the Society for Technical Communication.

**“Finding the Heart of Quality in Web Design.”** In original composition for publication in *Technical Communication Quarterly*.

***Technology for Professional Writers.*** In progress, online; being published by the Interactive Media Research Laboratory and the OSLO project at Utah State University.

***Conversations With the Cosmos..*** A discussion of the origins of human communication, looking simultaneously at history and new research in infant cognition.

***Web Evaluation from Inside Out,*** Evaluates the possibility for using genre theories for evaluating the quality of written texts in digital media.

## RESEARCH GRANTS FUNDED

Funded grants that I have written or co-written equal \$877,197 of which \$816,347 represents external funding.

**2007 -- \$20,000 Grant:** To create and evaluate eight game-based simulations in an engineering dynamics course using Flash Animation software.

**2006 -- \$8,000 Innovations Grant:** To create and evaluate a game-based simulation using Flash animation software.

**2002 -- \$40,000 Iomega Corporation Educational Research Project:** An open-ended project designed to develop educational capabilities for Iomega products. The focus of this grant is to find ways to penetrate the secondary education, multimedia market with Zip trademarked products.

**1999 -- \$34,000 Sandia National Laboratories Research Grant:** The second of two projects designed to research and develop techniques for capturing and preserving critical nuclear weapons-based processes. These processes are in danger of being lost as the specialists utilizing the relevant information retire, die, or move to new jobs (sole proposal author; project was co-developed with Christine Hailey).

**1998 -- \$88,000 EPA Water Quality Project:** Develop workshops designed to teach water quality testing methods to Native Americans. (Not a main participant in the grant writing; my role was to develop the interactive learning modules.)

**1997 -- \$27,000 Sandia National Laboratories Research Grant:** The first of two scheduled projects to create a multimedia archive for a nuclear weapons assembly process. Project involves converting 9 video tapes into MPEG format and consolidating these with sound, text and images into a module that can be used as a step-by-step assembly guide (sole author and principal investigator).

**1997 -- \$20,000 Higher Education Technologies Initiative Grant:** Create a complete online thermodynamics class, in CD-ROM and HTML formats (received highest rating of all proposals submitted for these funds, co-authored with Christine Hailey).

**1998 -- \$16,000 Center for Independent and Distance Learning Grant:** Research and develop online instruction, 1998-99 (sole author and principal investigator).

**1997 -- \$16,000 Center Asynchronous Learning Grant:** Build online program, 1997-98 (sole author and principal investigator.)

**1997 -- \$4,850 Faculty Assistance Center New Equipment Grant:** Purchase teaching hardware, 1997 (sole author).

**1996 -- \$14,000 Higher Education Technologies Initiative Grant:** Create online thermodynamics instructional module, 1996 (co-authored with Dr. Christine Hailey).

**1995 -- \$300,000 Higher Education Technologies Initiative Grant:** Examine on-line instruction of basic composition, 1995 (principal author; Professor Christine Hult was principal investigator).

**1995 -- \$293,347 US West Grant:** Create the CD-ROM textbook, *Alternative Voices: An Examination of Alternative Texts in Language and Literature* (co-author, co-investigator).

## **DIGITAL RESEARCH, DEVELOPMENT, AND PUBLICATION**

### **(Book Length Projects.)**

**Eight Simulations for Engineering Dynamics Course.** This is a collection of eight simulations programmed in Flash to simulate real world physical conditions.

**Technology for Professional Writers.** This is a digital project founded theories Dr. Christine Hailey and I have developed about genres appropriate for effective instruction. When completed, the document will be an online textbook available to any Technical Communication teacher or student who feels the content can be beneficial.

**Distributed Hard Drive Based Manufacturing Engineering Course:** The course contains more than 90 hours of high-resolution video, and extends DHD Technologies toward the development of an entire Manufacturing Engineering suite of courses (co-developed with Kelli Cargile Cook).

**Distributed Hard Drive Based Orbital Mechanics Support Module:** The module is designed to provide support for a graduate, orbital-science course being offered by Professor Frank Redd. The module was designed to provide students with the lecture component of their class, allowing Professor Redd to discuss more complicated issues during his class time. Unfortunately Professor Redd is ill, and the module will never be tested. (Co-developed with Kelli Cargile Cook.)

**Distributed Hard Drive Based Heat Transfer Course:** The course was developed in 2002. For use by student at the University of Texas at Tyler. It contains all course lectures and was made available in student labs for remediation.

**Distributed Hard Drive Based Electromagnetics Course:** The course was developed in 2002 for use by a student who could only attend one day a week. By this point, production costs are so low, it is worth producing instruction for one-time use by a single student.

**Distributed Hard Drive Based Thermodynamics Course:** Funded for \$40,000, the course was developed in 2001. It contains more than 45 hours of high-resolution video, and introduces a completely new approach to computer-based education. The course contains more than 500 pages and was successfully tested in the Spring and Summer of 2002.

**Online Thermodynamics Course:** Funded for \$20,000, the course was developed in 1999-2000 and placed online in July 2000. The course was developed using DHTML and Flash, and it includes lecture, animation, graphics and alphanumeric text. It consists of eight modules of approximately thirty pages each. The course was successfully tested in the Summer and Autumn of 2000 (co-investigator with Christine Hailey).

**Online Technical Writing Graduate Program:** Funded \$16,000 project to research and develop a viable online technical writing graduate program. The project began July 1997, and the State of Utah Board of Regents approved the completed program in July 1998. This program is now recognized as the prototype for all future, similar programs in the State of Utah (principal investigator).

**Thermodynamics Online Workbook: Chapters 2a and 2b:** A \$14,000, funded research project for the State of Utah examining the viability of a state-wide online workbook for all thermodynamics classes. The project was completed, demonstrated, and judged highly successful by reviewers; next phase—completion of the book (co-investigator with Christine Hailey).

**Online Manufacturing Engineering Workbook:** Unfunded research project. Produced 1,700 page (1.6GB) multimedia workbook for students working in the machining lab in Mechanical and Aerospace Engineering MAE-211. This 2-year project ended with qualitative research peer reviewed and published in Technical Communication and by the American Society for Engineering Education (Principal investigator, with Christine Hailey as co-PI).

**Alternate Voices, Alternate Cultures:** Funded \$16,000 project involves converting the 1996 CD-ROM version of the native-American text to a web-based version that will be taught in the winter of 1999 (Principal investigator).

**Online English 101 Program:** Participated in a \$300,000 grant to study feasibility of placing half of Utah State University's introduction to writing classes completely online. Project was judged highly successful by reviewers and is now a national showcase. Project was completed June 30, 1997 on time and under budget. (I was principal author of the grant proposal and technical advisor; Professor Christine Hult was Principal Investigator for the project.)

**Alternate Voices:** A \$293,000 online textbook for culture studies/literature. Text permits face-to-face or entirely online instruction. Project was completed 1996, on time and within budget. It was judged a success by the funding agency (US West).

## NEW TECHNOLOGIES INVENTED OR DEVELOPED

**Process Preservationist** – a new technology and profession for technical communicators. As retirement accelerates in the workforce, the need to preserve critical skills will become increasingly apparent. This skill, which is only now becoming public, will address that problem.

**Process Archivist** – Just as there will be a need for capturing critical skills, there will be an increasing need for people who can preserve them. A number of my recent publications have addressed these problems and solutions.

### **Two Distributed Hard drive protocols for archiving critical skills and information:**

- Process Preservation Protocol for saving and archiving technical skills.
- DHD Archival Protocol for archiving data.

### **Two New genre-based processes for identifying quality in digital writing**

- Process for establishing appropriate aims of discourse and genres for Web design.
- Database of appropriate online genres for design of digital education tools.

### **Four Distributed Hard Drive (DHD) protocols for distributing high bandwidth instructional materials to students:**

1. from faculty computers.
2. from libraries and remote campuses.
3. from remote labs.
4. from individual student computers.

## TRADITIONAL PUBLICATIONS—Unreviewed

**“Toward Identifying the Font Families in the Bush Memos.”** *Lab Report:*  
[http://imrl.usu.edu/bush\\_memo\\_study/supporting\\_material/Bush\\_Memos.pdf](http://imrl.usu.edu/bush_memo_study/supporting_material/Bush_Memos.pdf)

- "Chapter 22: HTML-Based Help."** *Mastering HTML*. Sybex Books, Nov. 1997, 641-53 (with Deborah and Eric Ray, by invitation).
- "What do You Need to Be Needed?"** *Intercom Magazine*, 26-29 Dec 1997.
- "The Waste Land In Owens' NIGHTLAND."** *Western American Literature*. (book review, by invitation) Spring 1997.
- "Two New Works By Louis Owens."** *Blue Mesa Review*. Albuquerque NM, Spring 1994--book review.
- "D'Arcy McNickle's *Wind From an Enemy Sky*."** *The North Dakota Review*. Spring 1989 -Grand Forks, ND--book review.
- "Compressions, an Essay in Stanzas."** *Blue Mesa Review*, Albuquerque, 1993, 166-70.
- "Swansong, Moments of Discord and Harmony."** *Petroglyph*, Logan, 1996, 29-34.

## CONFERENCE PAPERS AND PRESENTATIONS

- "Organic Texts."** Annual Association for Teachers of Technical Writing, San Francisco, March 2005 (invited).
- "Genre Theory, Engineering Education, and Circumventing Internet Bandwidth Problems."** *2002 ASEE Conference*, Boston, November 2002.
- "Genre Theory, Technology, and Knowledge Distribution."** *the 2002 IPCC Conference*, Portland, September 2002.
- "Overview of a Distributed-Hard-Drive-Based Educational Plan."** *2002 ASEE Gulf-Southwest Annual Conference*, The University of Louisiana at Lafayette, March 2002 (with C.E. Hailey).
- "Preserving Important Processes Before They Are Lost."** *Proceedings of 2001 Annual Conference of the American Institute of Aeronautics and Astronautics*, May 2001
- "Thermodynamics Cycles: A Multimedia, Independent Study Course."** *Annual Conference and Exposition of the American Society for Engineering Education*, July 2001, Scheduled for June 2001.
- "Applying Monster Media to Saving Endangered Skills."** *The 16<sup>th</sup> AIAA Aerodynamics Decelerator Systems Conference*, Oct. 2001.
- "A Case for Monster Media."** *Annual IEEE/SIG-DOC Conference*, Oct. 2000.
- "Adapting Pedagogical Theory to the Realities of Teaching Online."** *Beyond Experimental: Problems and Solutions in Online Writing Programs. Conference on College Composition and Communication*, Atlanta, Mar. 1999.
- "Leonardo da Vinci in Technical Communications: a New Demand for Renaissance Skills."** *Forces of Change in Technical and Professional Communication. Rocky Mountain Modern Language Association Convention*, Denver, Oct. 1998.
- "Adapting Online Instruction to the Real World."** *1st Annual Association for Teachers of Technical Writing Conference*, Chicago. Mar. 1998 (invited paper).
- "View From a Height: Problems in Online Education."** *Conference of Computers and Writing*, Honolulu, June 1997
- "Will the Real Author Please Stand up: Studies of Cheating Online."**

*Conference of Computers and Writing, Honolulu, June 1997.*

**"Holes in Hypermedia: an Empirical Study in Online Learning."** *Conference of the American Society of Engineering Educators.* Logan, UT, Sep. 1997.

**"Bringing the Liberal Arts University into the Next Century."** *Westminster University Faculty Technologies Conference,* Salt Lake City, June 1997.

**"Using Graphical Analysis of the Multimedia to Enhance Their Definitions."**  
*Conference for the Society of Technical Writers.* Salt Lake City, Sep. 1996.

**"Visual and Conceptual Metaphors in Hypermedia."** *Rocky Mountain MLA Convention, Albuquerque, Oct. 1996.*

**"Responding to the Impossible: Building Projects Not Allowed by the Software."** International Instructional Technologies Institute, Logan, UT, Sep. 1996. (Invited).

**"Hypertext, Hypermedia, Multimedia: Toward a Definition."** 1996  
*Computers and Writing Conference,* Utah State University.

**"Collaborating with the Enemy to Build Effective Technical Writing Programs."**  
*Computers & Writing Conference,* El Paso. May 1995.

**"Insights into Applying the Design of Multidimensional-Multidisciplinary Documents Towards the Creation of a New Literary Form."** 1993 *Rocky Mountain MLA Convention.* Denver, Oct. 1993.

**"The Problem With the *Cubism* in Joyce."** 1993 *Joyce Conference,* Irvine, June 1993.

**"Literary Criticism as an Act of Art Explicated."** Spaulding University, Department of Art and Art History, 1993--Multimedia--studio talk.

**"Picasso, DuChamp, and Kesey: Three Faces of Cubism."** *Rocky Mountain MLA Convention.* Ogden, UT, Oct. 1992.

**"The New Attacks by Native American Literature on the Traditional Western Literary Canon."** University of New Mexico Literary Canons Seminar, Albuquerque, 1991.

**"Wilde's 'Fairies In the Shade.'"** *2nd Annual Southwest Symposium.* University of New Mexico, Albuquerque, 1991.

**"Swansong: An Essay on Discord and Harmony."** *The 1991 Language and Literature Conference.* Louisiana State University--creative nonfiction.

**"The Waste Land in Malamud's *The Natural*."** *First Annual Southwest Symposium.* University of New Mexico, Albuquerque, 1990.

**"Ts'its'tsi'nako, Thought Woman in Ceremony."** *5th Annual Silko Symposium.* Texas Tech University, Lubbock, 1989.

#### INVITED WORKSHOPS

**"Adapting Graphics for HTML Environments."** A two-hour workshop at the 1998 Conference of the Intermountain Chapter of the STC.

**"Building Multimedia Teaching Applications—A One Day Workshop."** 1997  
*Conference of Computers and Writing.* Honolulu. (invited)

**“Building Online Education—A One Day Workshop.** *Westminster University, Faculty Technologies Conference, June 1997 (Invited).*

## ***SERVICE***

### **MISCELLANEOUS SERVICE AND EDITORIAL POSITIONS HELD**

**Editorial Advisory Board, EServer TC Library.** 2002-Present.

**Vice President, Intermountain Chapter of the STC,** 2000-2001.

**Chair, Faculty Senate Task Force on Distance Education (DETF) at Utah State University,**  
Dec 1997—1999.

**Academic Advisory Position on the Board of Directors for the Intermountain Chapter of the STC,** 1996-present.

**Judge, *Society of Technical Communications Online Document Design Competition,*** 1998.

**Software Review Editor, *Text Technology,*** Dec 1997—1998.

**Best of Show Judge, *Society of Technical Communication International Design Competition,***  
1996.

**Judge, *Society of Technical Communication International Design Competition,*** 1996.

**Judge, *Society of Technical Communications Online Document Design Competition,*** 1996.

**Chair, *Native American Literature Panel. 1996 RMMLA Convention,*** 1996.

**Peer Reviewer** for St. Martin’s Press.

**Judge, *Society of Technical Communications Annual Document Design Competition,*** 1995.

**Book Review Editor: *Blue Mesa Review,*** 1989-1991.

**Innovations Editor: *Highway and Heavy Construction Magazine,*** 1985-1989.

**Managing Editor: *CMI News,*** 1983-1985.

## ***PROFESSIONAL PUBLICATIONS***

### **PUBLISHED PROFESSIONAL/TECHNICAL ARTICLES**

**"An Overview of DARPA Funded Flyash Projects." *Highway and Heavy Construction.*** May 1988.

**"Emulsions and Rejuvenators in Coldmix." *Highway and Heavy Construction.***  
(feature story) March 1988.

**"Polymers in Coldmix." *Highway and Heavy Construction.*** (feature story) March 1988.

**"Polymers in Hotmix," *Highway and Heavy Construction,*** (feature story) February  
1988.

**"Five Years Into the Future," *Highway and Heavy Construction.*** (cover story)  
February 1988.

- "Taisei Rotec Demonstrates Successful (Deep) Hotmix InSitu Recycle Technique in Portland."** *Highway And Heavy Construction*. (cover story) January 1988.
- "Old Ideas."** *Highway and Heavy Construction*. December 1987.
- "Salt Lake City Experiments With PCC and Flyash Base Stabilizers."** *Highway and Heavy Construction*. November 1987.
- "An Introduction to Polymers."** *Highway and Heavy Construction*. November 1986 (reprinted October 1987).
- "Oregon State's Recycle Study."** *Highway and Heavy Construction*. August 1987.
- "Protecting Your Computers From Lightning."** *Highway and Heavy Construction*. July 1986 (reprinted July 1987).
- "New Recycle Techniques in Michigan."** *Highway and Heavy Construction*. June 1987.
- "Coldmix Recycling in Cuba, New Mexico."** *Highway and Heavy Construction*. October 1986.
- " Abrasive Aggregates Destroy Hatch Plant in its Maiden Project."** *Roads and Bridges*. July 1986.
- "Cape, Mengel, Zignego Share Wisconsin's Largest Highway Project Ever."** *Paving News*, Spring 1985.
- "Gallop Gertie Gets First Facelift in Fifty Years."** *Pacific Builder and Engineer*. October 1983.
- "Manufacturers and Contractors Join to Create New Industry."** *Highway and Heavy Construction*. October 1985.
- "Michigan Implements New Recycle Technique."** *Paving News*. Fall 1985.

## ***RELEVANT WORK HISTORY***

### **Editorial Consultant/Research Writer**

**TASC Albuquerque**

**2340 Alamo SE, Suite 307, Albuquerque, NM (1985-88)**

Wrote approximately twenty-five articles published in national magazines and journals on subjects including computers, computer manufacturers, industrial equipment and manufacturers, universities, states, and local communities. See publications section for specifics.

### **Managing Editor of the CMI News and Publications Manager**

**CMI Corporation and Caterpillar Tractor Company's Paving Products Division  
I-40 and Morgan Rd., Oklahoma City, OK (1983-85)**

Gathered topics and wrote technical news stories of interest to an industrial audience for the CMI News and other national publications. Managed production of the CMI News, a 64 to 86 page, 4-color, 80,000 issue quarterly. "Managing Editor" meant writing many of the stories, designing, laying-out, and coordinating production of each issue.

Designed graphic ads and brochures; scripted and produced video tapes for Caterpillar Tractor Company's Paving Products Division. The ads regularly appeared in national publications; the tapes were used in national expositions.

### **Publications Coordinator**

**University of Puget Sound**

**Tacoma, Washington (1978-79)**

Received two national awards: "Best New Image" (Council for the Advancement of Secondary Education) and "Best Complete Package" (Zellerbach Paper Company) for work on creating a university publications image. Developed graphics for a recruiting program that was measured at six times more effective than its next nearest predecessor. Developed a graphics system that permitted generation of 189 completed projects in 180 days.

### **Art Director**

**Folio III, a design group**

**Tacoma, Washington (1975-78)**

Designed and wrote documents for a variety of local and national companies, including Weyerhaeuser, Boeing, Nalley's, Haley's Candies, Puget Sound National Bank, and the University of Puget Sound. Among the documents I worked on was a 640 page proposal from Boeing to US Congress.