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**Shaping Design Education through
Visual Culture, Community, and Distance**

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Introduction

Margaret Haughey, editor of the Journal of Distance Education, writes, "Learning itself cannot be designed. It can only be designed for through [sic] the design of learning environments that... incorporate (learners') experiences, demand practice, follow their growing understanding, and provide feedback."¹

Design education has too often focused on design as an activity of object making apart from the communities and disciplines that shape it and from the culture it creates. In a broad and critical sense, design examines issues, methodologies, strategies, and theories in its relationship to community and culture. Shaping experiences that place design in a cultural context is critical to creating meaningful forms and messages and to understanding the many layers of visual and verbal information. We live in a complex and expanding visual culture, and design education must critically embrace new technology and holistic approaches that reflect and anticipate change.

This paper discusses the shaping of design education as a participant in the development of visual culture and as an activity connecting a breadth of disciplines. The virtual communities of the Internet provide a model and an opportunity for the development of new types of communities and distance learning teaching methods. Web communities in the form of web logs (blogs), asynchronous chatrooms, and synchronous threaded discussions have given voice to the marginalized and have created shared experiences—a phenomenon of importance to graphic design education.

Our research is based on a collaborative project between the University of Arizona and Oregon State University to develop a new online General Education course called Design: Culture and Language and an accompanying online interactive critique tool/portal called Interactive Critique Space.

In creating the course, we believe that teaching is most effective in learning environments that encourage individual experiences and accommodate a variety of learning styles. We seek to promote design as a discipline and as a vital cultural participant. Our course attempts this, in part, by examining a broad array of visual culture, from web sites to billboards, through western and eastern examples, vernacular expressions, and historic examples from indigenous cultures. The course critically compares origins, roles, audiences, technology, and the implications of dissemination.

Our holistic and collaborative approach to course development demonstrates our pedagogical objectives. These objectives address broad general education learning outcomes for a diverse body of students. Our course seeks to enhance understanding of the connected nature of design to all disciplines. As James O. Freedman, former president of Dartmouth College, wrote, "Too often, the increasing tendency toward specialization has had fragmenting consequences for the mind. It has sheltered men and women...behind narrowly drawn disciplinary boundaries, thereby discouraging them from becoming educated in the fullest sense of the term."²

Curriculum decisions were based on the following objectives:

- Examine ethical implications and impact on social policy making.
- Study processes as well as objects (form-making is not a focus of the course).
- Include the study of "material culture," examining tangible aspects of human behavior as evidence of larger cultural patterns.
- Combine historically separate areas of exploration into a common dialogue.
- View students as co-creators of course content and active participants in instruction.
- Create meaningful interaction spaces and events that encourage and foster participation and collaboration.
- View faculty as facilitators and mediators rather than communicators of static bodies of information.

Visual Culture

The Design: Culture and Language course is designed to enable all undergraduates to critically analyze, discuss, and participate in visual culture. The course consists of four modules: an introductory module that focuses on theory, principles, methodologies, and issues in representation, form, and ideation; and three modules that examine theory and issues in identity (individual and collective roles and values), ritual (cultural conventions and roles), and story (public and private verbal and visual narratives and message making).

Instruction takes the form of lectures, discussions, and critiques. Assignments include journal entries, visual exercises and projects, and writing (including a major research paper). Many of the assignments are collaborative.

The course modules survey the critical issues of (primarily) applied design: private and public, collective and individual. Each module addresses issues of responsibility, participation, and interpretation with broad historical references. Design is approached as a discipline. While the modules contain aspects unique to design, they also share aspects found in other disciplines throughout the humanities.

The format is the same for each module's information delivery, group interaction, and assignments. Project (physical) outcomes are open-ended. Process development, conceptual statements, outcome documentation, and self-analysis are important components.

As mentioned earlier, the course is broken into four modules further detailed below.

Module 1: Introduction: Concepts and Skills

The first module surveys concepts and builds skills. It explores ways in which an idea can be represented visually, from abstract to the literal, and creates a body of knowledge for use throughout the course. This includes analyzing text or images in rhetorical as well as visual form. Various problem-solving methods and principles of visual organization are also covered.

Module 2: Identity

The second module studies private and public identity issues, including the roles that gender, education, ethnicity, and age play in shaping identity; the implications of publicly disseminated identities; and how design contributes to the understanding of ourselves and others. This module's project is to privatize a public space. Students alter an existing public space for the purpose of revealing, highlighting, and commenting on conventions, roles, and public messages.

Module 3: Ritual

The third module explores the conventions, codes, and objects that shape and support civil, religious, and legal rituals. This module's project involves building and flying a kite, or baking and presenting a cake for a specific event. Both activities illustrate how design (building the kite, baking the cake) and ritual (flying the kite, cutting and eating the cake) are interconnected.

Module 4: Story

The last module examines storytelling, specifically narrative structures, sequencing, and message making. Students analyze structures and relationships between words and images, explore sequencing, use metaphors, and study and apply semiotic theory. This module's project involves creating a personally rooted and meaningful public or private placed message using a word and image combination, a sequence, and/or a short animation.

Community

Because this course is being proposed as a university-wide introductory offering for all undergraduates at both schools and would be accessible to those beyond via the web, the community it develops will be broad-based. A sense of community will be developed and refined as the course progresses. The course's learning outcomes are centered around developing abilities to critically analyze and describe interactions and relationships, heightening awareness of the past, and making cross-cultural analyses.

The class will be broken into discussion groups of six to ten participants. Students will begin building their community the first week through online introductions, and will develop their interactions in weekly faculty-moderated and/or virtual team discussion sessions and critiques.

Examining Theory to Shape a Community

In *City of Bits*, William J. Mitchell writes of using the web to create communities of users in public spaces (e.g., widely accessed and known portals and web sites) and private spaces (e.g., password-protected portals and web sites that transmit information to specific communities or allow experiences culturally forbidden in public).³ This duality is one of the key components of our course. Public and private spaces are useful constructs through which to shape course content because they underlie much of visual culture. Each module includes activities that explore private and public issues such as interaction and place.

The model used by Alverno College, a competitive private undergraduate college in Milwaukee, Wisconsin, also shaped our holistic and cross-disciplinary approach. Their curriculum is based on eight areas of study: analysis, aesthetic engagement, citizenship, communication, global perspectives, problem solving, social interaction, and valuing. Together these areas form the basis of a comprehensive liberal arts experience, providing balance, fostering critical thinking, and developing active social participation.

We were also influenced by Benjamin Bloom's taxonomy for categorizing the level of abstraction of questions that commonly occur in teaching. These are competence (knowledge, comprehension, application, analysis, synthesis, evaluation) and skill demonstrated (observation, understanding, using information, seeing patterns, generalizing, comparing). This taxonomy provides a useful structure in which to organize course content, develop learning objectives, and make evaluations.⁴

The course is further based on a range of influential learning theories: Learning Style, Social Cognition, and Communities of Practice as discussed briefly below.⁵

Create Varied and Personalized Learning Experiences

- Supported by Learning Style theory, which describes how "concrete perceivers" and "active processors" absorb information through direct experience, i.e., doing and acting, and how "abstract perceivers" and "reflective processors" understand experiences by reflecting and thinking about them. (The course will allow for all learning styles.)

Create a Community (and Culture)

- Influenced by Vygotsky's Social Cognition theory, which holds that culture itself provides methods and tools for thinking. Student learning is affected by the culture and community of the course.

Create Commitment and Belonging to Community

- Based on Communities of Practice theory pioneered at the Institute for Research on Learning in Palo Alto, learning is fundamentally social, i.e., learning environments are also social environments. The process of learning is inseparable from community membership; our identity changes in the group as learning takes place. Learning occurs as a function of the activity, context, and culture. Students teach other students what they have learned, which encourages collaboration and helps prevent isolation.

Distance

Donald Norman, author of *The Psychology of Everyday Things*, compares a successful interface to a doorknob. Users subconsciously turn it to enter and exit a room without thinking of it as the interface to the room.⁶ Similarly, our expectation is for students to enter and exit the learning environment effortlessly, allowing them to focus instead on the learning objectives at hand.

Following that approach, we have been working to create an experience that meaningfully fosters collaboration among participants, creates a sense of ownership, provides continual feedback, and allows multiple ways of interacting (e.g., journal entries, group critiques, archiving and retrieving, and virtual team collaborations). Effective interaction empowers users throughout the community. In *No Sense of Place*, Joshua Meyrowitz writes that "Media can create a sense of sharing and belonging or a feeling of exclusion and isolation."⁷

We have been influenced by theory in computer-mediated communication, which views virtual interaction as a social phenomenon. While web-based courses cannot replace face-to-face interactions, it has been argued that computer-mediated communication can be equally effective when interactions are guided by clear patterns and activities.⁸

The issues and considerations to be addressed in developing a distance learning pedagogy may include:

- Mediated learning attempts to capture qualities of face-to-face interaction. Community and social presence facilitate learning and interaction.
- Interaction shapes each participant's identity. Participants gain not only knowledge but also new social and communication skills.
- Many participants need help transitioning from traditional classroom settings to more independent learning and active online participation.
- Active online participation involves critiquing, manipulating, analyzing, creating, and retrieving, not merely watching and passively consuming.

- Successful courses are modular, interchangeable, and can be easily updated and customized. They include a range of delivery and interaction methods appropriate to the range of participants.

Building a Community through Virtual Interaction

To a great extent, the course is made possible through the Interactive Critique Space tool being developed at the University of Arizona Treistman Center for New Media with support through a grant from the Northwest Academic Computing Consortium.

Interactive Critique Space will allow students to post multiple versions of visual work and allow instructors to participate with students in synchronous and asynchronous discussions and to provide immediate feedback. Students will be able to review each other's work and posted external examples simultaneously; projects and examples can be archived and retrieved for later review. Students can work together as virtual teams on visual and written projects.

The tool will support rational, structured, and spontaneous decisions. It will also allow students to browse examples and compare the work and responses of their peers.

Interactive Critique Space overcomes the primary limitations of existing tools: prohibitive costs (e.g., Macromedia Breeze), limited scalability due to proprietary source code (not Open Source), limited user interface customization, and limited multiple-user interaction opportunities (e.g., virtual team dialogues).

At the University of Arizona, the tool will be integrated with Moodle, a free Open Source online course management tool. At Oregon State University, the tool will be integrated with Blackboard. These course management tools will provide organizational, grading, and scheduling functions.

Conclusions

Linus Torvalds, creator of the Linux operating system, states in a recent article in *The New York Times*, "To do something well, you have to get a lot of people involved."⁹

In the spirit of Linux and Open Source, collaboration has been a key component of our project. Course and tool creation and development have involved numerous faculty, programmers, and committees at both institutions and at our funding agency. The course itself will be led by a team, and students will be asked not only to participate in discussions and critiques, but also to assist in developing course content such as visual examples.

The critical aspect of this collaboration has been an understanding of roles, openness to new and different ideas, and continual dialogue.

Based on integration of disciplines, cultural and social contextualization of design issues, and collective and individualized interaction, our research creates a new and, we believe, vital pedagogy of visual instruction, contributing knowledge to the disciplines of design and fine art and to the humanities at large.

The community-forming aspects of the web are a crucial component of distance learning courses, whether web-enhanced or fully web-delivered. Web communities offer a model for the creation of physical communities. As such, they carry implications for traditional brick and mortar teaching methods, already shaping them into more structurally flexible and technologically enhanced, interaction-based experiences.

Community is critical to learning, understanding, and change. The challenge before us is to consider how new technologies can be used to engage all voices and to foster critical dialogue, broad thinking, and shared understanding.

End Notes

1

Margaret Haughey, "Supporting Learning through Technology," *NLII 2003 Annual Meeting Proceedings*, 1, www.educause.edu/nlii/annual_review/2003/supportlearning.asp

2

James O. Freedman, *Idealism and Liberal Education*. Ann Arbor: University of Michigan Press, 1996, 2.

3

William J. Mitchell, *City of Bits: Space, Place, and the Infobahn*. Cambridge: MIT Press, 1996, 23.

4

Benjamin S. Bloom, *Taxonomy of Educational Objectives: The Classification of Educational Goals*. London: Longman Group, 1969.

5

Henry Gleitman, *Psychology*. New York: WW. Norton, 1981, 96-163, 501-503.

6

Donald A. Norman, *The Psychology of Everyday Things*. New York: Basic Books, 1988, 9-11, 87-92.

7

Joshua Meyrowitz, *No Sense of Place: The Impact of Electronic Media on Social Behavior*. New York: Oxford University Press, 1986, 7.

8

Mia Lobel, Michael Neubauer, Randy Swedburg, "The eClassroom used as a Teacher's Training Laboratory to Measure the Impact of Group Facilitation on Attending, Participation, Interaction and Involvement," *International Review of Research in Open and Distance Learning*, 2002. www.irrodl.org/contents/v3.2/lms.html

9

David Diamond, "The Sharer: Questions for Linus Torvalds," *The New York Times Sunday Magazine*, September 28, 2003, 23.

Bibliography

John Berger, *Ways of Seeing*. London: BBC and Penguin Books, 1977.

Ernest G. Bormann, *Small Group Communication: Theory and Practice*. New York: Harper and Row, 1990.

Anthony Cohen, *The Symbolic Construction of Community*. New York: Routledge, 1985.

Wendy Cown, Focus on the Student: How to Use Learning Objectives to Improve Learning, www.boxesandarrows.com/archives/focus_on_the_student_how_to_use_learning_objectives_to_improve_learning.php.

Meredith Davis and Robin Moore, *Education through Design*. Raleigh: North Carolina State University and the North Carolina Arts Council, 1993.

Donis Dondis, *A Primer of Visual Literacy*. Cambridge: MIT Press, 1973.

Challis Hodge, Semiotics: A Primer for Designers, www.boxesandarrows.com/archives/semiotics_a_primer_for_designers.php.

Don Koberg and Jim Bagnall, *The Universal Traveler*. Los Altos: William Kaufmann, 1972.

Marshall McLuhan, *Understanding Media: The Extensions of Man*. Cambridge: MIT Press, 1994.

Philip B. Meggs, *Type and Image: The Language of Graphic Design*. New York: John Wiley and Sons, 1992.

Nicholas Mirzoeff, *The Visual Culture Reader*. New York: Routledge, 2002.

Nicholas Negroponte, *Being Digital*. New York: Random House, 1995.

Louise Sandhaus, *New Media. New Narratives?* Chicago: American Center for Design, 2000.

Ralph Wilerman, *Exercises in Visual Thinking*. Kansas City: Midpoint Books, 1980.

Luke Wroblewski, Visible Narratives: Understanding Visual Organization, www.boxesandarrows.com/archives/visible_narratives_understanding_visual_organization.php.

Richard Saul Wurman, *Information Anxiety*. New York: Doubleday, 1991.