NEFDC EXCHANGE

www.nefdc.org   *New England Faculty Development Consortium*

Message From The President
Where We've Been, Where We're Going
Judy Miller, Associate Dean for Special Academic Initiatives, Clark University

As I prepare to hand over the reins of NEFDC to your new President, Tom Thibodeau, it seems appropriate to reflect on where the organization has been, and where it is going. My reflection was prompted, in part, by my decision to clean out the three boxes of NEFDC paper "archives" that have been passed from President to President since the late 1990s, and which, as far as I know, no President has actually looked at.

NEFDC had its beginnings in 1988 as the Massachusetts Faculty Development Consortium (MFDC), which Susan Holton (at Bridgewater State College) started and ran as a labor of love and with funding from her institution. In 1989, the organization expanded to include private institutions as well as public, and an Advisory Council was formed. As I looked through file folders of MFDC materials, I was intrigued by the comparisons between the MFDC of the past and today's NEFDC. Things were more informal in the early days: the Advisory Council met at restaurants around the region, and Susan conducted a voluminous paper correspondence with members, presenters, and other

organizations, always with unfailing courtesy. But our predecessor organization was extremely active: MFDC organized numerous events at various campuses around Massachusetts. The MFDC of the early 1990s boasted 38 member institutions and 12 individual members (compared with 45 institutional and 250 individual members today), and total annual conference attendance of about 350 people. MFDC took on some big projects, such as a 1990 survey of faculty development resources and services in Massachusetts, and an annual (print) Time and Talent directory to enable faculty developers to readily identify and contact presenters and consultants nearby.

In 1997, MFDC was reconstituted as NEFDC, and once communication and documents went electronic, the paper trail disappeared. The NEFDC Board now has an online "Virtual Office" for the storage of important documents, but as a recent attempt to reconstruct a complete record of NEFDC conferences has shown, such records are far from complete. Fast forward to 2001, when I joined the NEFDC Board. Again, it's illuminating to reflect on the changes that have

From the Editors:

In the spirit of the theme of our upcoming Spring Conference—Connecting the .edus: Using Technology to Connect with our Students—the articles in this issue of Exchange provide a broad range of perspectives on teaching and learning with technology.

From our Keynote speaker Peter Doolittle (and coauthors) we have an excerpt from an essay about online teaching that discusses pedagogical strategies, principles, and useful examples of implementation. Another piece is the first of a three-part series that describes the efforts and findings of the Visible Knowledge Project, a collaborative effort by 70 faculty members at 21 institutions that investigated the impacts of new digital media on education. (The remaining two parts of the essay are available at www.academiccommons.com.) Two other articles describe some of the day-to-day and week-by-week experiences of faculty and faculty develop-

ers who are using technologies such as YouTube and Blackboard. From the practical, to the theoretical, to the philosophical issues surrounding the use of technology in higher education, we hope readers will find much to discover and contemplate.

As this issue goes to press, we are preparing to say farewell to Judy Miller, whose term as NEFDC's President of the Board expires in May. We will miss her wonderful leadership and the sustained vigor, dedication, creativity, and good humor that has always characterized her tenure as President and Board member. All the best, Judy!
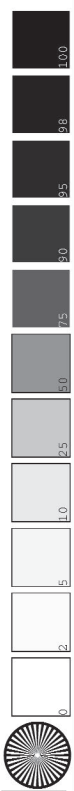
We hope you enjoy this issue, and we welcome your feedback and future contributions. If you would like to submit an article for our Fall, 2009 newsletter, please send a word document to Jeanne Albert at jalbert@middlebury.edu.

In This Issue...

New England Faculty Development Consortium & the Ocean State Higher Education Advanced Network Present

Spring 2009 CONFERENCE

Connecting the .edus:
Using Technology To Connect With Our Students

KEYNOTE SPEAKER: Dr. Peter Doolittle

Friday, May 29, 2009

Middlebury College, Middlebury, VT
Dartmouth College, Hanover, NH
Worcester Polytechnic Institute, Worcester, MA
New England Institute of Technology, Warwick, RI
University of Connecticut, Storrs, CT

This year OSHEAN and NEFDC will be venturing forth into our first virtual conference: the conference will be held at the above five sites and connected via video conferencing for our plenary presentation.

Come see how a regional conference can be held synchronously across New England, with active, local participation through technology.

Dr. Doolittle teaches Constructivism and Education, Multimedia Cognition and College Teaching as an Associate Professor in the Department of Learning Science and Technology. He is the recipient of the Outstanding Teaching Award for the School of Education in 2008, the Excellence in Graduate Student Advising Award for the College of Liberal Arts & Human Sciences in 2007, and the Certificate of Teaching Excellence for the College of Human Resources and Education in 2004. He has also had the opportunity to teach educational psychology in Mexico, Ireland and Malawi. His research is focused on learning in multimedia environments, with specific emphasis on the role of working memory, and he has been published in the Journal on Educational Multimedia and Hypermedia, British Journal of Educational Technology, Theory and Research in Social Education, Journal of the Scholarship of Teaching and Learning, and the Journal on Excellence in College Teaching. He is also currently the Executive Editor of the International Journal of Teaching and Learning in Higher Education and the Associate Editor of the International Journal of Research on Cyber Behavior.

Online Teaching: Field-Tested Principles of Pedagogy and Practice

Peter Doolittle, Associate Professor,
Department of Learning Science and Technology, Virginia Tech
Krista Terry, Director, Technology Learning Center, Radford University
Stephanie Scheer, Assistant Director, Instructional Technology, University of Virginia

The following list of principles represents a synthesis of experience, empirical support, and current thinking in the domain of online teaching and learning. These principles represent a set of core beliefs constructed by the authors over a period of several years. The authors each have experience in online teaching and learning, although from varied perspectives. Stephanie Scheer's perspective is based primarily within the realm of institutional support. Krista Terry's views are from the vantage of instructional technology and design. And, finally, Peter Doolittle is involved in online teaching and learning primarily as an instructor. These differing lenses provide a three-dimensional picture of the acts and artifacts related to the common practice of online teaching and learning.

[In addition to the Pedagogical Strategies listed below, the original essay also includes principles under the headings Institutional Administration Strategies and Instructional Design Principles. See http://kpterry.asp.radford.edu/Online_Teaching_Version_1.pdf-- The editors.]

Pedagogical Strategies.

Principle 11: Teachers and students should be prepared to implement technology as a tool for inquiry.

Implementing technology in any domain requires a new set of intellectual tools. While a significant number of students and teachers are readily acquainted with computers, most do not have the training necessary to use technology as a tool for inquiry. Student construction of knowledge, and teacher's facilitation of this construction, necessitates that both be prepared for the journey of inquiry.

Example: The WebQuest site (http://webquest.sdsu.edu/webquest.html), developed by Bernie Dodge, serves as an excellent gateway through which to examine many examples of how the Internet can be utilized to support structured inquiry orientated lessons. The popular Webquest concept utilizes a template designed to provide students with the opportunity to access and work with a range of online resources to explore and answer meaningful and significant questions.

Principle 12: Teachers should use technology to create authenticity, which facilitates the process of student inquiry and action. Authenticity provides real-world context and is comprised of two equally important components: authentic materials and authentic inquiry. Relative to authentic materials, technology is tailor-made for the delivery of primary source materials, such as pictures, diaries, maps, audio recordings, and manuscripts. However, mere access to these materials is not sufficient; indeed, these materials must be used in the course of authentic inquiry.

Example: One site that allows the teacher to develop lessons that encourage authentic student inquiry is International Constitutional Law (http://www.uniwuerzburg.de/law/index.html). This site contains constitutions and other textual material from over 150 nations. The site also links the user to the CIA World Fact book (http://www.odci.gov/cia/publications/factbook/) and Elections Around the World (http://www.electionworld.org). The material available provides the teacher with the opportunity to develop lessons that allow students to conduct comparative political studies using authentic materials.

Principle 13: Teachers should use technology to foster local and global social interaction such that students attain multiple perspectives on people, issues, and events. Technology provides an unprecedented avenue to interact locally and globally with others. The Internet provides teachers the opportunity to expose their students to multiple perspectives and contexts beyond textbooks, while providing a focal point for cooperative learning groups, group discussions, and debates. In addition, MOOs/chat rooms, audiographics, email, and listservs provide students with the ability to interact with groups of students in other states and countries, as well as distant experts.

Example: Bringing the world into the classroom through

> **The challenge that lies before a student is not to memorize a seemingly well-defined corpus of knowledge, but rather to engage that knowledge intellectually and with discipline.**

online newspapers is a powerful example of how the Internet can support teaching about current events, peoples and cultures of the world, and the international position of one's homeland. Thirty-five newspapers from five different regions - Africa, the Americas, Asia, Europe, and the Middle East - are accessible from Newspapers Around the World (http://www.majbill.vt.edu/history/ewing/Global_newspapers.htm). [This is a course website that is no longer accessible. However, the Internet Public Library (http://www.ipl.org/div/news/) is another starting point for international newspapers online. –The editors.]

Principle 14: Teachers should facilitate student knowledge construction by using technology to build on students' prior knowledge and interest. A key element in the construction of new and meaningful knowledge is the link between prior knowledge and new knowledge, and when these links are fostered through the student's pursuit of personal interest the personal nature of knowledge and meaning construction is emphasized and empowered. However, a caveat in the use of technology is to not let technology become a substitute for personal knowing; that is, technology should not be used as a warehouse of knowledge substituting for the student's own knowing.

Example: An example of what is possible when technology is used to build on student prior local knowledge is the Bland County History Archives at Rocky Gap High School, in Southwest Virginia (http://www.bland.k12.va.us/bland/rocky/archives.html). Students collected oral histories, scanned historical documents and photographs, saved transcriptions as html files, and created a searchable database, and thus developed an online historical archive of their community.

Principle 15: Teachers should enhance the viability of student knowledge by using technology to provide timely and meaningful feedback. Learning is enhanced through the cyclical process of experience, knowledge construction, and knowledge assessment. A crucial aspect of this cycle, and one often overlooked, is continued knowledge assessment. This continued, or formative, assessment involves feedback

relative to the viability of the knowledge that is constructed. Technology usage must then provide not just resources and stimuli for inquiry, but also the means to assess the knowledge one is constructing.

Example: The EPA's Recycle City (http://epa.gov/recyclecity/) and the Government Printing Office's Place the State interactive games (http://bensguide.gpo.gov/9-12/games/interactive.html) are nice examples of online simulations/games that allow students to test their ideas, hypotheses, and knowledge. Within Recycle City, the feedback allows students to re-evaluate their policy choices based upon their initial goals and budget. Within Place the State, students are provided with feedback when they correctly locate and name U.S. states.

Principle 16: Teachers should cultivate students' academic independence by using technology to foster autonomous, creative, and intellectual thinking. The ultimate goal of education is the development of autonomous students capable of engaging in personally meaningful inquiry resulting in viable knowledge. Therefore, technology should be used primarily to foster academic independence and the ability to think and act. Students must develop the ability to use technology as a tool in the pursuit of large, meaningful questions, providing resources, stimulating thought, challenging ideas, and fostering understanding. The challenge that lies before a student is not to memorize a seemingly well-defined corpus of knowledge, but rather to engage that knowledge intellectually and with discipline.

Example: Teen Hoopla (http://www.ala.org/teenhoopla/activism.html) provides teachers with a powerful resource to engage students in civic learning, deliberation, and action. Teen Hoopla connects to such organizations as Greenpeace, Habitat for Humanity, and Amnesty International. This site highlights the potential the Internet has to heighten students' awareness of local and global issues, while providing avenues, ideas, and plans for independent social action. [Although teenhoopla is no longer operating, information about it is available at the American Library Association's website, http://www.ala.org/. --The editors.]

## Message From The President Continued from page 1

occurred in the organization in the eight years since then. Our fall conference has steadily grown, and has moved from the College of the Holy Cross in Worcester, to the Westford Regency, to the DCU Center in Worcester, all to accommodate increasing numbers. As our numbers have grown, so has the profile of our nationally known keynote speakers, among which we number Parker Palmer, Dee Fink, Barbara Walvoord, and George Kuh. We are now booking fall speakers close to two years in advance! Our spring conference, originally a "roundup" event for faculty developers, has expanded into a full-fledged faculty conference and a collaborative effort with various other groups, including the Middlesex Community College COPPER Cluster (on the scholarship of teaching and learning), librarians (on information literacy), Northeastern University Martha's Vineyard Summer Institute on Experiential Education and the World Association for Cooperative Education (on experiential learning), and most recently Ocean State Higher Education Advanced Network (OSHEAN) (on educational technology). As our conference attendance, and thus the workload of handling registrations, has grown, we have rolled out online conference registration and payment. To expand the reach of our organization to graduate students (our future faculty), we have added two graduate liaison positions to the Board. We have also expanded the geographic reach of our organization,

with Board representation from all the New England states, and with conference attendees coming from as far away as Florida, Utah, and Ontario.

I am proud that NEFDC is one of the largest, most active, and oldest regional faculty development organizations in the U.S. All this, of course, would not be possible without the hard work and dedication of our 16 Board members. I know I speak for them when I say that although Board service requires a substantial commitment, it is more than amply rewarded by the opportunity to develop relationships with colleagues from diverse institutions. Board service is also a terrific professional development opportunity: three former Presidents of NEFDC (Mary Deane Sorcinelli, Matt Oullette, and Eric Kristensen) have gone on to serve as President of POD, the international faculty development network.

It's time for me to leave the Board, as I turn my attention to POD business (serving as editor of the annual publication, To Improve the Academy). I am leaving the organization in excellent hands. Like the early founders of MFDC, Tom Thibodeau and the rest of the Board are full of energy, commitment, good ideas, and the personal touch that makes this organization so special. It's been a privilege to serve, and of course this is not goodbye, only farewell until the next NEFDC conference!
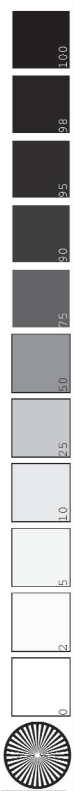
NEFDC Spring Conference Agenda (at each site)

Friday, May 29, 2009

Middlebury College, Middlebury, VT
Dartmouth College, Hanover, NH
Worcester Polytechnic Institute, Worcester, MA
New England Institute of Technology, Warwick, RI
University of Connecticut, Storrs, CT

8:30 - 9:00	*Conference Registration*
9:00 - 9:15	*Welcome, Introductions*
9:15 – 11:15	*Interactive Keynote Presentation,*
	Dr. Peter Doolittle
11:15 – 11:30	*BREAK*
11:30 – 12:30	*Session I: Workshops/Interactive Discussions*
12:30 - 1:30	*LUNCH*
1:30 - 2:30	*Session II: Workshops/Interactive Discussions*
2:30 – 2:45	*Break*
2:45 – 3:30	*Closing session*

The Welcome and Introductions, Keynote Presentation, and Closing Session will be teleconferenced, linking all five sites. For more information, including registration and directions, please visit www.nefdc.org.

Connecting With Others

There are two dominant national organizations —POD (Professional and Organizational Development in Higher Education) and NCSPOD (The North American Council for Staff, Program, and Organizational Development)—whose members do faculty development work. Both have excellent fall conferences, with many sessions appropriate for faculty members interested in professional development. Visit their websites at www.podnetwork.org and www.ncspod.org.

Capturing the Visible Evidence of Invisible Learning: Part I

Randy Bass, Executive Director,
Center for New Designs in Learning and Scholarship,
Georgetown University
Bret Eynon, Executive Director,
LaGuardia Center for Teaching and Learning,
La Guardia Community College (CUNY).

Déjà 2.0

Facebook. Twitter. Social media. YouTube. Viral marketing. Mashups. Second Life. PBWikis. Digital Marketeers. FriendFeed. Flickr. Web 2.0. Approaching the second decade of the twenty-first century, we're riding an unstoppable wave of digital innovation and excitement. New products and paradigms surface daily. New forms of language, communication, and style are shaping emerging generations. The effect on culture, politics, economics, and education will be transformative. As educators, we have to scramble to get on board, before it's too late.

Wait a minute. Haven't we been here before? Less than a decade ago, we rode the first wave of the digital revolution--email, PowerPoint, course web pages, digital archives, listservs, discussion boards, etc. As teachers and scholars, we dove into what is now called Web 1.0, trying out all sorts of new systems and tools. Some things we tried were fabulous. Others, not so much. Can we learn anything from that experience? What insights might we garner that could help us navigate Web 2.0? How can we separate the meaningful from the trivial? How do we decide what's worth exploring? What do we understand about the relationship of innovations in technology and pedagogy? What can we learn about effective ways to examine, experiment, evaluate, and integrate new technologies in ways that really do advance learning and teaching?

The teaching and research effort of the Visible Knowledge Project (VKP) could be a valuable resource as we consider these questions. Active from 2000 to 2005, VKP was an unusual collective effort to initiate and sustain a discipline-based examination of the impact of new digital media on education. A network of around seventy faculty from twenty U.S. colleges, primarily from American history and culture studies departments, gathered not only to experiment with new technologies in their teaching, but also to document and study the results of their inquiries, using the tools of the scholarship of teaching and learning. In this collaborative and synoptic case study, under the title *The Difference that Inquiry Makes*, we try to capture and make sense of the visible evidence of this relatively invisible learning as it emerged over five (and more) years of collaborative classroom inquiry. We share participants' reports on key elements of the VKP inquiry, and integrate their reports into a framework that can help us learn from this experience as we navigate a fast-changing educational landscape.

Invisible Learning

What do we mean by "invisible learning?" We use this phrase to mean at least two things. First, it points us to what Sam Wineburg, in his book *Historical Thinking and Other Unnatural Acts*, talked about as "intermediate processes," the steps in the learning process that are often invisible but critical to development.[1] All too often in education, we are focused only on final products: the final exam, the grade, the perfect research paper, mastery of a subject. But how do we get students from here to there?

> **The VKP ethos was formed by a belief in the value of messiness, of unfolding complexity, of adventurous, participant-driven inquiry that would inform the nature of the collective conversation.**
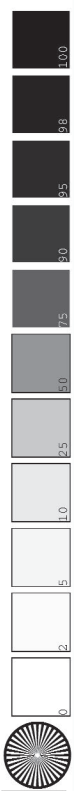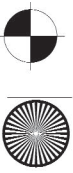
What are the intermediate stages that help students develop the skills and habits of master learners in our disciplines? What kinds of scaffolding enable students to move forward, step by step? How do we, as educators, recognize and support the slow process of progressively deepening students' abilities to think like historians and scholars? In VKP, from the beginning, we tested our conviction that digital media could help us to shine new light on—to make *visible*—and to pay new attention to these crucial stages in student learning.

Second, by invisible learning we also mean the aspects of learning that go beyond the cognitive to include the affective, the personal, and issues of identity. Cognitive science has made great strides in recent years, scanning the brain and understanding everything from synapses and neurons to perception and memory. Educators are still struggling to grasp the implications of this research for teaching and learning. However, perhaps because it is less "scientific," higher education has paid considerably less attention to (and is even less well prepared to deal with) the role of the affective in learning and its relationship to the cognitive. How does emotion shape engagement in the learning process? How do we understand risk-taking? Community? Creativity? The relationship between construction of knowledge and the reconstruction of identity? In VKP we explored the ways that digital tools and processes surfaced the interplay between the affective and the cognitive, the personal and the academic.

Visible Evidence

Education at all levels has largely taken on faith that if teachers teach, students will learn--what could be seen as a remarkable, real-life version of "If you build it, they will come." In recent years, calls for greater accountability have produced a new emphasis on standardized testing as the only appropriate way to assess whether students are learning. Meanwhile, growing numbers of faculty in higher education have taken a different approach, engaging in the scholarship of teaching and learning--using the tools of scholarship to study their own classrooms--to deepen their understanding of the learning process and its relationship to teacher practice. Spurred by the ideas of Ernest Boyer and Lee Shulman of the Carnegie Foundation for the Advancement of Teaching, faculty from many disciplines have posed research questions about student learning, gathered evidence from their classrooms, and gone public with their findings in countless conference presentations, course portfolios, and scholarly journals. This movement, with its focus on classroom-based evidence, provided key tools and language for the Visible Knowledge Project. It allowed VKP faculty to study the impact of new technologies on learning and teaching, and it also helped us frame questions about problems and practice, inquiry

and expertise that remain critical as we move into a new phase of technological innovation and change.[2]

The Visible Knowledge Project

The Visible Knowledge Project emerged in 2000 from the juxtaposition of these two powerful yet largely distinct trends in higher education--the scholarship of teaching and learning movement and the initial eruption of networked digital technologies into the higher education classroom. Responding to a dynamic combination of need and opportunity, faculty engaged in multi-year teaching and learning research projects, examining and documenting the ways the use of new media was reshaping their own teaching and patterns of student learning. Participating faculty came from a wide range of institutions, from community colleges and private liberal arts colleges to research universities; from Georgetown and USC to Youngstown State, the University of Alabama, and City University of New York (CUNY). Meeting on an annual basis, and interacting more frequently in virtual space, we formed our research questions representing a broad spectrum, shared ideas about research strategies, discussed emerging patterns of our evidence, and formulated our findings. The digital resources used ranged from Blackboard and PowerPoint to interactive online archives and Movie Maker Pro. The VKP galleries (http://crossroads.georgetown.edu/vkp) provide a wealth of background information, including lists of participants, regular newsletters, and reports from more than thirty participants, as well as a number of related resources and meta-analyses.[3]
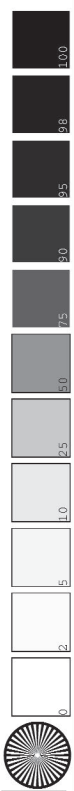
The VKP ethos was formed by a belief in the value of messiness, of unfolding complexity, of adventurous, participant-driven inquiry that would inform the nature of the collective conversation. A few scientists and social scientists entered the group and helped create exciting projects, but the vast majority of the participants were from the fields of history, literature, women's studies and other humanist disciplines. While technology was key to our raison d'être, our inquiries often evolved to focus on issues of pedagogy that transcended individual technologies. We wanted to learn about teaching, to learn about learning. We wanted to go beyond "best practice" and "what worked" to get at the questions about why and how things worked--or didn't work. In some cases, we went further, rethinking our understanding of what it meant for something to "work." Our questions were evolving, shaped by the exigencies of time and funding as well as our on-going exchange and new technological developments. We struggled with ways to nuance and realize our inquiries, to come up with workable methods and evidence that matched our changing and, we hoped, increasingly sophisticated questions.

Over the course of the Project, we found that participants' teaching experiments started to group in three areas:

Reading--Engaging ideas through sources/texts: As VKP took shape at the end of the twentieth century, the great museums, universities, and research libraries of this country were mounting their collections on the Web. Web sites such as the American Memory Collection of the Library of Congress vastly expanded the availability of archival source materials on the Web. It was a time, as Cathy Davidson put it recently, of digitally-driven "popular humanism."[4] Responding to this opportunity, VKP's historians and culture studies faculty explored the effectiveness of active reading strategies using primary sources, both textual and visual, for building complex thinking. Introducing students to the process of inquiry, faculty tested combinations of pedagogy and technology designed to help students "slow down" their learning, interpret challenging texts and concepts, and engage in higher order disciplinary and interdisciplinary practices. For example, Susan Butler, teaching an introductory history survey at Cerritos College, had her students examine primary sources on different facets of the Trail of Tears, made available online by the Great Smoky Mountains National Park, PBS, and the Cherokee Messenger; as students grappled with perspective and the evolving definition of democracy in America, Butler examined evidence of the ways that scaffolded learning modules that incorporated online primary sources could expand students' capacity for critical analysis. Meanwhile, Sherry Linkon at Youngstown State used online archives to help students in her English course create research papers that contextualized early twentieth-century immigrant novels. And Peter Felten at Vanderbilt integrated online texts, photographs and videos into a history course on the 1960s, analyzing the ways students did—or didn't—apply critical thinking skills to visual evidence. Across the board, the focus was less on "searching" and "finding" than on analyzing, understanding, and applying evidence to address authentic problems rooted in the discipline. Testing innovative strategies, faculty asked students to model the intellectual behaviors of disciplinary experts, focusing earlier and more effectively on the learning dimensions that characterize complex thinking. (For sample projects addressing these questions, see http://cndls.georgetown.edu/ crossroads/vkp/themes/poster_showcase_reading.htm)

Dialogue—Discussion and writing in social digital environments: As VKP faculty moved into the world of Blackboard and Web-CT, they explored ways that discussion and social writing in online environments can foster learning. Projects explored strategies for using online communication to make the intermediate processes of learning more visible and to provide opportunities for students to develop personal and academic voice. For example, Mills Kelly, teaching a Western Civilization survey at Virginia's George Mason University, focused on the possibilities of using online tools, including the WebCT

discussion board and a special GMU Web Scrapbook, as tools for enhancing collaborative learning. Meanwhile, Ed Gallagher at Lehigh University tested the impact of his detailed and creative guidelines for students in prompting more interactive and substantial discussion in an online context. In general, carefully structured online discussion environments provided students and faculty a context in which to think socially; they also allowed discussion participants to document, retrieve and reflect on earlier stages

> **Although we started out with questions about technology, early on it became clear that the questions were no longer merely about the "impact of tools" on learning; the emergent findings compelled us to confront the very nature of what we recognized as learning, which in turn fed back into what we were looking for in our teaching.**

of the learning process. This ability to "go meta" offered a new way for students and faculty to engage more deeply with disciplinary content and method. Highlighting the scaffolding strategies that might maximize student learning, these projects gathered evidence of learning that reflected the social and affective dimensions of these digitally-based pedagogical practices. (For sample projects, see http://cndls.georgetown.edu/crossroads/vkp/ themes/poster_showcase_discussion.htm)

Authorship--Multimedia construction as experiential learning: As multimedia authoring became easier to master in these years, faculty became interested not only in creating multimedia presentations and Web sites; they also sought to develop ways to put these tools into the hands of students. Many VKP scholar-teachers were guided by the