The Difference that Inquiry Makes:
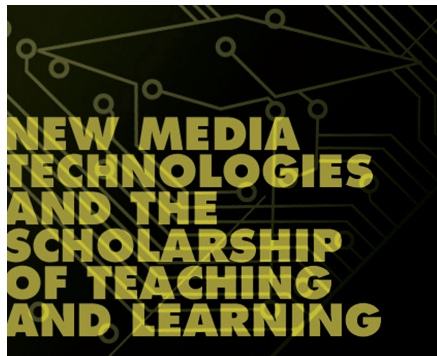
A Collaborative Case Study of Technology and Learning, from the Visible Knowledge Project.

Edited By Randy Bass & Bret Eynon

Academic Commons

"The Difference that Inquiry Makes: A Collaborative Case Study of Technology and Learning, from the Visible Knowledge Project," *edited by Randy Bass and Bret Eynon*

Center for New Designs in Learning and Scholarship (CNDLS)
3520 Prospect St. NW, # 314
Washington, DC 20057
http://cndls.georgetown.edu

Table of Contents

The Difference that Inquiry Makes:

A Collaborative Case Study on Technology and Learning, from the Visible Knowledge Project

Shaping a Culture of Conversation:
The Discussion Board and Beyond

Edward J. Gallagher, Lehigh University

From The Difference that Inquiry Makes: A Collaborative Case Study on Technology and Learning, from the Visible Knowledge Project[1], *edited by Randy Bass and Bret Eynon*

The Backstory: Discovering Community[2]

I can still remember the exhilaration with which in 1997 (before Blackboard and WebCT) I approached my first discussion board as part of the Lehigh English Department's participation in the groundbreaking Epiphany Project.[3] I had long used such methods as "reaction cards" to engage student involvement, so the move to discussion boards was a natural evolution. But evolution to what? Today the discussion board signifies class community for me. But that was not overtly so in the beginning. Influenced greatly by a seminal *College English* article by Marilyn Cooper and Cindy Selfe (I had attended Selfe's Computers in the Writing-Intensive Classroom workshop at Michigan Tech in 1996), my statement of goals for the Epiphany project discussion board had a "radical" tinge to it, with rather stentorian claims about a free space for students and liberation from the teacher's agenda or ideas. But that approach was a mistake. It led to using the discussion board as a bulletin board (I am tempted to say soap box) on which students posted individual, discrete messages that others were supposed to read but, by and large, didn't, at least with much palpable impact. There was no "epiphany" that I can remember, just a gradual awareness over time as VKP approached that there was no meaningful "discussion" on my discussion board and that, without interaction, I was not fully tapping the potential of the new technology.

---

1 About VKP: In all, more than seventy faculty from twenty-two institutions participated in the Visible Knowledge Project over five years. Participating campuses included five research universities (Vanderbilt University, the University of Alabama, Georgetown University, the University of Southern California, Washington State University, and the Massachusetts Institute of Technology), four comprehensive public universities (Pennsylvania's Millersville University, California State University (CSU)--Monterey Bay, CSU Sacramento, Ohio's Youngstown State University, and participants from several four-year colleges in the City University of New York system, including City College, Lehman, and Baruch), and three community colleges (two from CUNY--Borough of Manhattan Community College and LaGuardia Community College, and California's Cerritos College). In addition to campus-based teams, a number of independent scholars participated from a half dozen other institutions, such as Arizona State and Lehigh University. The project began in June 2000 and concluded in October 2005. We engaged in several methods for online collaboration to supplement our annual institutes, including an adaptation of the digital poster-tool created by Knowledge Media Lab (Carnegie Foundation), asynchronous discussion, and web-conferencing. The VKP galleries and archives (https://digitalcommons.georgetown.edu/blogs/vkp/) provide a wealth of background information, including lists of participants, regular newsletters, and reports and essays by participants, as well as a number of related resources and meta-analyses. For this article, the author gratefully acknowledges the students whose work is cited here. All students whose work is included have granted the author permission to use the material.

2 The first part of this essay is drawn from "Improving the Discussion Board", the full final report on my Visible Knowledge Project, and from the accompanying essay, "Teaching Students to Talk to Each Other: Improving the Discussion Board." http://www.lehigh.edu/~indiscus/index.html

3 Epiphany Project: http://www.has.vcu.edu/epiphany/

That potential was to create a community of learners, and gradually "community" replaced rebellion and resistance--that is, the cultivation of the *individual* voice--as my signifier. In fact, the most important thing I discovered (or uncovered) through this VKP project on discussion boards was the depths of my passion for community, a passion that has quite visibly informed my pedagogy ever since, especially in a second experimental course that I will talk about later.

Achieving community is the continual worry in the personal blog that I kept during the VKP course--indeed, causing two serious blow-outs with the students midway through. In my VKP final report I frankly admitted that I sometimes felt "obsessed with the need for community," felt embarrassed by the ranting way I talked about it, but felt more and more "the pressing need for people to talk with each other, to get beyond difference, to work together, to get along." The "Improving the Discussion Board" VKP project, then, would in reality be about the creation of community.

The VKP Course: The Centrifugal Force of Discussion Boards

For my VKP project I developed a new lower-level, general education course, "American Literature: The Essentials," as a laboratory for experiments in scaffolding student work on the discussion board in order to create a learning community. The course had several distinctive aspects:

- I gave in to what I've been calling the centrifugal force of discussion boards and made discussion 100% of student evaluation: there were no essays, exams, quizzes.

- Thus, instead of treating the discussion board as an "add-on," I allowed it to reshape my entire pedagogy.

- Discussion board assignments progressed incrementally over the course of the semester from single posts without replies to five-post interaction sequences with multiple participants, enabling me to focus on the dynamics of each step, enabling students to move in guided fashion from simpler to more complex interactions.

- Students completed a lengthy narrative survey at each new step (8 surveys in all) to encourage reflection on their own work as well as to provide me with timely feedback for in-course adjustments.

- Every other week was a "meta week" in which I used student posts and surveys from the previous week as texts, not only to deepen the intellectual inquiry but also to raise consciousness about the art of discussion board writing itself.

The strategy that I tested for improving the discussion board in this course had two major parts: providing a framework with which to think about the discussion board and providing some practical tools with which to work on it.

The Framework: A Constitution, a Mantra, and a Metaphor

Providing a framework for thinking about the discussion board was necessary because many students long experienced in navigating the traditional terrains of essays, papers, reports, tests, and quizzes need to unlearn some behaviors and learn some others to perform well in this relatively foreign new space. The answers to question 13 on survey 1, which asked students to specify an analogy or metaphor for "college," for instance, revealed--quite frighteningly, actually--that these students saw themselves as passive, solitary, joyless toilers in a middle world devoid of intellectual community. Thus, I spent significant effort pointing student views of the discussion board toward a community ethos through a course constitution, a mantra, and a metaphor--three different ways of

saying essentially the same thing: that the discussion board was central not marginal, essential not trivial, to the learning in this course.

- Since without a sense of community, discussion withers, I began with a document that I called our constitution, founding the course as a learning community and positioning the discussion board as its "visible heart." And my list of the qualities of a good discusser described the marks of community.

- I repeated and coached students to repeat aloud over and over again the mantra-like "the art of writing on the discussion board is to keep the conversation going," endeavoring to inculcate an almost subliminal understanding of the difference with their traditional writing experiences.

- The metaphor of "discussion ball," a non-competitive racquetball game, eventually complemented by a short video (now, unfortunately, corrupted), gave students both a visual feel for discussion activity and provided a handy vocabulary with which to designate each post in a sequence: the serve, the return, fielding the return, volley1, volley2, etc.

The Tools: Five Eyes, Nine Legs, and a Social Voice

The second part of my design strategy was closer to the bone, to give students the actual practical tools they needed to talk to each other in a community way. It seemed to me that students needed to know and practice three basic skills to realize the potential of the discussion board: how to start a discussion, sustain a discussion, and write in a social style. My ideal discusser, I said with a touch of Monty Python silliness, had five eyes with which to start a discussion, nine legs to sustain one, and a social not a solo voice.

The five eyes: How start a discussion about a literary work? How, in the language of "discussion ball," do you serve? I wanted students to be more conscious of options, less indebted to the whims of inspiration. So, adapting Benjamin Bloom's classic taxonomy of cognitive skills and punning on the last syllable, I encouraged students to realize that they had five sets of eyes not one. The five eyes are hypothes_ize_, anal_yze_, synthes_ize_, internal_ize_, and critic_ize_–that is, student serves can begin to examine what the story is about, how it works, how it compares to other stories, how it relates to themselves, and whether it is good or bad. The idea is that 1. each individual student would be conscious enough to pause before initiating a discussion thread and choose an eye not only on the basis of personal interest but also one that contributes variety to whatever other eyes are in play at that moment within the group; and that 2. each individual student is conscious enough of his or her own choices to practice all of the eyes over time, exercising all of Bloom's levels of thought, growing as an agile thinker.

The nine legs: How keep a discussion going? How insure that a discussion "has legs"? How, in the language of "discussion ball," do you return a serve or field a return? Here I wanted students not only conscious of alternatives but of a hierarchy of alternatives. You can, I prompted the students, give a discussion legs by agreeing, questioning, enhancing, answering, building, disagreeing, weaving, re-directing, and re-thinking. And, in addition, I divided these nine legs into three roughly hierarchical categories, trying to compel awareness that certain kinds of posts were highly stimulating while others were likely to be dead-end conversation-stoppers. For instance, to agree with someone is *fine*, whereas enhancing someone's point with additional information is *better*, and building a new insight on a previous point *best* of all. My goal was not to assign a precise price tag to each and every post but to raise consciousness about the nature of responding, to give students concrete strategies to "keep the conversation going," and thus to encourage students to strive, over time, for a higher percentage of higher-level replies.

Writing socially: How do you make it sound that you are genuinely inviting discussion? My insight, sparked by analysis of their work in the first meta week, was that many students had a natural (maybe "naturalized" is better) tendency for what I later came to call "writing solo" on the discussion board rather than "writing socially." The goal of "writing solo"--fine for formal essays--is usually to prove a point to others and reach closure. On the more informal discussion board, however, the goal of "writing socially" is to explore a topic with others and defer closure as long as possible. Writing solo very often means distinguishing views you already hold from those held by others, but on the discussion board ideally you are building your views with others. I endeavored to sensitize the students to these differences through extensive modeling of posts that successfully achieved conversational voices. A socially written serve, for instance, might begin with some sort of rhetorical "crook of the finger" and/or end with some sort of rhetorical "open door" that invited engagement. And a returner writing socially might begin with a transition immediately acknowledging the serve, clearly signaling at once how the return will keep the conversation going, how it will add value.

The Meta Week: The Middle Ground

The work of implementing and implanting these new tools was done in the "meta weeks." I divided the fourteen-week semester into seven two-week units, one unit on each literary work. Each two-week unit was divided into one week on the text and one week--which I called the "meta week"--reflecting intensely on their work on the discussion board. There was nothing especially extraordinary about the "text week" except that students posted according to specific guidelines as I gradually rolled out the three tools described above. I offered some mini-lectures and led teacher-centered discussion, desks in a semi-circle, sometimes with a rotating five to six students in an "inner circle," while students posted at least once for each of our three classes per week. In the meta weeks, however, students completed lengthy narrative surveys requiring them to re-read and reflect on their posts and the posts of others in the previous week, and our texts those weeks were entirely student posts themselves. Applying one of the key VKP lessons--the need for an intermediate, middle ground that inculcates student reflexivity--I picked out posts and sequences of posts to display on screen in order to trigger not only further and deeper discussion of our subject matter but also to make students conscious of the nature of effective and ineffective posts and the dynamics of effective and ineffective interchanges. Devoted to analysis and evaluation of their posts with the students as a community, the meta week performed essential VKP work.

In the surveys I asked a variety of questions aimed at forcing the students to think critically and respond narratively (not just check a box) about their posts and interactions (my final report has generous clips from student responses), for example, did you use the "five eyes" prompt, did you do anything differently after class discussion about varying your "returns," what was the best serve in the class, what was your best serve, what difficult returns did you face, what were the best returns you received, what was your best return, and so forth. I have replicated the in-class meta week analyses of their responses in the student work sections (section f) of each of the survey results in my final report. For instance, for open class discussion during a meta week, I selected several survey 4 posts in which students chose their best serve in the unit, labeled the reasons for their choices in an interesting way to suggest an easily remembered, unofficial typology of serves (the "truly original serve," the "reader friendly serve," the "making people think serve," and so forth), juxtaposed their reasons with the post itself for all to see, and then added my reflections--indicating how I agreed or disagreed with the choices and reasons, offering both kudos and correctives. Examples of other kinds of analyses I offered in class include return clusters in five to six person groups, a case study of a three-person group, a comparison of five group discussions (survey 7 f.2-f.6), and for evaluation purposes I did a horizontal study of the posts of each student across the entire semester. In all, the survey student work sections of my final report contain annotations and analyses of approximately two hundred discussion board posts, most of which were the subject of discussion themselves

during the meta weeks as the students tried on and tried out their five eyes, nine legs, and social voices.

Signs of Community: "Their insight helped me look at things differently"

My experiment (he says, modestly) was a success. I developed a sensible rationale for the discussion board, a meaningful language to talk about the tools and parts of discussion, a set of guiding documents and an album of model posts for future use, and a fair basis (in students demonstrating proficiency with the three tools) for grading discussion board performance. Most importantly,most students--not all, of course, and some haltingly, for sure--learned to talk to each other and in doing so talked to me in the language of community that I had longed to hear:

> *Normally, other students have very little to do with my own learning process. Most times, the other students in class are only though[t] of as the ones you need to be sure to beat on the next test. They are the ones that determine the curve, and therefore how well you do in class. This class is the only class I can think of that makes the other students a learning tool for the class. Listening to and understanding other students comments helped me better understand the books we were working on. Their insight helped me look at things differently.*

In the final survey (question 14) I asked, "In general, what role, if any, do you think other students and a sense of community have in your own learning process?" Except for one student**,** the responses vigorously lauded the value of community:

- "Our community is what shapes us, after all."
- "Knowing who you're talking to makes you want to post better, return serves on time, and check back to see what people said. It was the entire driving force of the whole class. I always pictured who I was typing to."
- "Sure, it's always important to form your own ideas in the end, but one thing I do know: I don't have all the answers."
- "It's like being able to grocery shop for ideas."
- "I guess overall, the sense of community between students is what makes learning fun."

In this course I had found a way to improve the discussion board that worked for me and added an important dimension to student intellectual lives. In short, I found a way to design for what I valued most. But that's not the end of the story.

Chapter Two: A Culture of Conversation Goes Large

As I compiled my lengthy Web site final report on "Improving the Discussion Board" for my VKP inquiry project and wrote the accompanying essay, "Teaching Students to Talk to Each Other," in the spring of 2006, I participated in two activities that would ratchet what I had learned to another level. First, at Lehigh University the need for better community was in the air. Spurred by several serious diversity issues and incidents, there was a movement on campus aimed precisely at realizing a greater sense of community. "The Movement"[4] staged a well-attended class walk-out, led several marches, developed manifestoes and lists of demands, addressed the president personally at an

---

4 http://www.themovementatlehigh.blogspot.com/

outdoor rally at the flag-pole in the center of campus, and defined itself in this way: "We are a student-led group working to promote diversity, acceptance, and understanding within the Lehigh community. Our goal is to create an environment where all students, faculty, and staff can feel welcome to express their individuality in a safe community atmosphere." The message was that Lehigh was not as good a community as it should be and that people needed to talk to each other about how to make it better.

Secondly, simultaneously, I was a member of a Lehigh faculty development seminar (ITaLLIC)[5] focused on the large lecture course, precisely the prime academic symbol of university "community-less-ness." In that workshop I developed the idea for a new course entitled American Film: The Essentials, a large enrollment course (I wanted one hundred but settled for sixty-five) aimed squarely at engineering, science, and business students--students who spend at least their first two years in anonymous big lecture courses in which they have never talked or been "recognized" in the classroom. What nicer challenge than to bring my passion for community excited by the VKP experience, a passion now visibly alive on the wider campus, to bear on a large group of students expecting a lecture course in a coliseum-like setting. Instead of developing ways to enhance the centrality of the lecture in large courses like other members of the ITaLLIC seminar, I wanted to dislodge the lecture and to experiment with changing the culture of large classes. (See my "A Fresh Look at Large Classes" for more on the motivation behind this course.)[6]

Here was a chance for a second experiment, built on the findings of the first experiment. In the first course, I wondered if I could create a sense of community by designing a relatively small enrollment course around a conversational model and single dialogic tool (an online discussion board). Now, informed by the lessons of that course--along with my insights into student learning of where and how that design worked--I was able to ask a second-level question: could I make use of a larger set of emerging social tools to create a sense of community in a large lecture course? In the earlier course all I had for community building was the discussion board, but now, just a few years later, I had wiki, blog, and journal tools on Blackboard; world-wide communication capability from the likes of Skype; the promiscuous video dump that is YouTube; cell phones with cameras; the example of Facebook and other wildly successful social networking sites; and, especially, I had the iPod (this was Lehigh's inaugural iTunesU course).

I was eager to bring this array of new tools to bear on the creation of a larger-scale "culture of conversation," not only within the class but between the class and the surrounding campus community and even between the class and the world beyond the campus. Movement eyes were on Admission policies regarding diversity and on racial and gender problems that were the concern of the Student Affairs wing (and they succeeded in influencing the hiring of a new Admissions director and a new LGBTQA director, among other things). My eyes, though, as you can imagine, were on academics and, in particular, the politics of the individual classroom, which to me--not the dorm or the fraternity or the sorority--was the heart of the university, the place where respect should rule and community be created. My contribution to the Movement, then, was to talk about what I was trying to do, that is, to change classroom dynamics, to create a culture of conversation in the university core that would radiate outward to all aspects of community interaction.

―――――――――

5 http://www.lehigh.edu/~inllnote/issues/issue7/LargeLecture.htm

6 http://www.lehigh.edu/~inllnote/issues/issue7/FellowLargeClasses.htm

The Amtrak Experience: (Intelligent) Conversation makes (Good) Colleagues

I wanted American Film: The Essentials to be more than just a "fun" elective for these engineering, science, and business majors, more than one that fit a time slot and checked off a requirement in column B. I wanted them to see the value and utility in community. My framing device, then, was the story of my "Amtrak Experience," in a sense another tool I (subconsciously) developed while participating in VKP. During the two dozen or so Amtrak trips to and from Washington I made for VKP activities, I was continually struck by a common scene: a group of three or four or five young professionals would board, turn seats toward each other, buzz feverishly about the work just done or to be done (the proposal just delivered, the consultation just accomplished, the reports needing to be written, the client follow-up urgently required) for fifteen to twenty minutes, and then for the rest of the two-hour trip engage in just as intense conversation, often on very serious non-work matters (all, of course, for virtually the entire car to hear). It occurred to me that what I was witnessing was group bonding, dramatizing that high-level professional expertise was only part of what went into a successful team, that, in fact, "conversation makes colleagues," and therefore that "*intelligent* conversation makes *good* colleagues." I asked students to envision that what we were doing in class was helping them prepare for their Amtrak Experience.

Building Community from Class to Campus and Beyond

Armed with new tools to fire my community-generating dreams, I experimented in the large film course with every technological and non-technological community building activity that I could work in. There is no way to describe this course other than to say it was an orgy of community activities. The "Web 1.0" discussion-board schema, now old pedagogy to me, was still in my rhetoric the "heart of our learning community" (though by this time I had hit on re-naming the Blackboard discussion-board button "Good Conversation" to create an appealing psychological feeling about participating), but since there was so much more that I wanted to experiment with, I conveyed my scaffolding and meta-analyses by podcast and limited them to the first four weeks of the semester. The discussion board, however, was only one of a dozen or more design strategies, too many to detail here (click for a more extensive list), but below are three examples specifically relating, respectively, to establishing community within the class, with the campus, and with (as I joked) the cosmos:

- *The course was radically and playfully participatory:* I learned from the earlier course--and the Amtrak experience--that not all social communication is work nor serious. Sometimes to move forward you have to go sideways or do somersaults. In this large community I knew I had to use new tools to create many different spaces, capacious enough for intellectual play and massively inclusive contributions. They had to be spaces that invited participation and rewarded it by continuously creating surprising communal resources that benefited everyone. For example, I always had a half-dozen or so wiki's with colorful names (Techneek of the Week, Wee-Deetails, Prospecting, The Fun House, Fork in the Road, the Pooling Place, The Artful Dodger) operating where students would post, sometimes seriously, sometimes in jest, sometimes mandatorily, sometimes voluntarily. For instance, in order to dramatize the rebel nature of the early Marlon Brando, the sixty-five students pooled (in The Pooling Place, of course) seventy-eight entries on the early 1950s that ranged from a YouTube video of Patti Page singing "How Much Is That Doggie in the Window," to a photo-spread on Levittown, to a look at the Doomsday clock, just two minutes from nuclear nightmare in 1953. The wiki's provided a variety of spaces in which students actively composed and consumed "texts" for the course.

- *The course used new social and mobile tools to bring the conversation from the*

outside in: In order to perforate the classroom walls and to foster a larger culture of conversation on the campus itself, I used the iPod in what I thought was a more creative way than just recording my lectures. I used the iPod to bring outsiders *in* to the course. The idea was to show the students that "real people *out there*," especially people in their fields, not just English teachers in sound-proof classrooms, cared about the films we were studying, recognized their personal and cultural impact, and enjoyed engaging in intelligent conversation about them. So I recruited twenty-some volunteers, went to their offices or work places, and recorded five- to fifteen-minute "cameo-casts" available to students on iTunesU. Among the recruits who did cameo appearances in the course modeling intelligent conversation *a la* the Amtrak experience this way were our provost, a Chemical Engineer, who talked with me about *Streetcar Named Desire*; our dean, a geologist, whose favorite film is *The Wild Bunch*; and only the untimely death of her mother kept our president from offering comments on *High Noon*. I encouraged students to "write back" to these high-level administrators using "nine legs" kinds of principles, but only a few did (there's more to be done on priming students to courageously complete the circle).

- The course encouraged students to use new social tools to take the conversation out: The purpose of a final "Good Conversation" assignment was to encourage the students to be missionaries for the culture of conversation, especially outside the campus. They were to choose a film, find a partner outside the class who would also watch the film, spend at least one-half hour in good conversation with that partner (using the five eyes as prompts), and report on that conversation to me. My strong suggestion, however, was to use Skype, a blog, a video conference--any other new technological tool--as means to hold that discussion with someone far from campus, and over 20% of the class did so, mostly with parents, and, to be specific, mostly with mothers. One student partnered with a brother serving in Iraq.

Empowered by success in the VKP course and emboldened by the student appetite for more community revealed by the Movement (a handful of whose leaders were, by accident, in the class then), American Film: The Essentials was a full-frontal assault, using a suite of pedagogical tech-niques in which new media played a major role, on the almost inevitable student anonymity, deper-sonalization, and passivity of many traditionally organized large classes. In final surveys 75% of the students found the five eyes valuable, 86% thought the class achieved a sense of community, and 90% affirmed the presence of a culture of conversation. One student even developed the culture of conversation idea into an ongoing project [7] that won him a Young Entrepreneur award the following semester!

What I saw in both the earlier course, which I studied as my classroom inquiry, and the later course in which I applied those lessons in a new design, more than satisfies me not only of the value of trying to shape a culture of conversation but also of the presence of a variety of powerful new media tools with which to accomplish it. On the basis of personal experience begun in the VKP immersion, I am firmly committed to continually offering courses as small but non-trivial gestures toward the creation of a world with a better sense of community.

————————

7 http://cultureofconversation.com/