Practicing Multiple Knowledges with Information Technology:

An Example from an Urban Theory Course

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It is somewhat ironic that the ASA chose "Cities of the Future" as the theme for this year's meetings, since there is currently less agreement in urban sociology and urban studies about the theoretical status of cities than ever before. At the century's onset, founding sociologists like Weber, Simmel, and Tonnies saw cities as sites for the birthplace of modernity and modern individuals. Their claim has recently been undermined by historical research that has found in ancient cities like Cairo the same cosmopolitan and urbane qualities formerly attributed to the "modern" (that is, Western) city. By the 1920s, the first Chicago School of sociology viewed the city as a *sui generis* unit of social structure and an explanatory variable in social organization more generally. Yet research in the political economic vein has since critiqued the city's theoretical self-sufficiency by extending urban factors far beyond city limits into global networks of economy, politics, and managerial elites. In turn, much of this research presumes a coherent and central order (of urban systems, if not cities themselves) that poststructuralists have called into question with their assertion of the micro constitution of domination and resistance. Currently, urban theory is characterized by paradigmatic debate and a shifting empirical focus away from the level of urban toward the global and micro.

Sociologists like myself who teach in undergraduate programs like urban studies will recognize, and must shape the classroom around, the fact that this intellectual tumult extends over a range of disciplines. For example, the founding sociologists shaped a debate that historians and philosophers also wage. The Chicago School framed the concept of social disorganization that behavioral and educational sciences continue to pursue. Urban political economy spatialized the concern for justice and equality that geographers, planners, and environmental scientists operationalize. And urban poststructuralism's concern for culture has given new prominence to

the humanities and arts in urban studies. The growing popularity of urban studies programs at institutions like Vassar College, which has seen unprecedented growth in student majors in recent years, may reflect the many and growing ways that scholars and students see in cities the dynamics of contemporary life. Ideally, core courses in urban studies, like the Urban Theory course I will describe in this paper, should allow undergraduates an entry into understanding the connections between these disciplines.

This pedagogical concern resonates with the growing concern in undergraduate teaching institutions for teaching to multiple intelligences (Gardner 1999, 1983), since these disciplines embody different ways of knowing. To connect the disciplines at the conceptual level (e.g., as a history of urban theory) is crucial, but alone it may not encourage the blossoming of intellectual agendas and self-understandings—an important objective in undergraduate education. In this paper, I will argue that information technology (IT) offers a useful for the practice of diverse multiple knowledges that reflect the diverse disciplines, paradigms, and theoretical debates. My data come from the Urban Theory course I designed and taught last year to 30 students in the urban studies program at Vassar College. However, I hope my lessons can apply to teaching courses *within* sociology, especially since our discipline has been charged with reaching out to expanding ours ways of knowing beyond its conventional methodologies (e.g., Vaughan, Sjoberg and Reynolds 1993).

THE CONTEXT FOR RETHINKING INFORMATION TECHNOLOGY

In Vassar's urban studies program, majors pursue a variety of urban interests, from the social sciences (e.g., urban poverty) to the humanities (the production and aesthetics of public art) to the natural sciences (the spatial distribution of environmental hazards). Each major selects two concentrations from Vassar's departments that best frame the intellectual agenda they prepare with their urban studies advisor. Simultaneously, urban studies majors encounter a cross-disciplinary set of common debates and ideas through three required core courses, of which Urban Theory is one alongside an introductory course and senior seminar. The introductory

course achieves this through five two-week segments of paired instruction by a core faculty and a guest faculty from a representative urban discipline.[1] Urban Theory does not use this survey format, and only one core faculty teaches it (myself, in this case). Still, like the other core courses, it strives to incorporate or at least address the disciplinary gamut of students' agendas.

In designing this course from scratch, the program's multidisciplinary focus posed my first pedagogical challenge. My default inclination would have been to teach urban theory from a very sociological lens, beginning with the Chicago School of human ecology (now seen as the basis for urban studies) and moving through sociological research on urban conflict, ethnic enclaves, public space, and urban growth. Granted, a handful of non-social science works (e.g., Jane Jacobs) have become standard additions to this narrowly construed body of literature. Still, these speak to empirical debates framed within the social sciences, and they can be "conventionally" taught in the narrow disciplinary manner I described above. Although I wanted to widen the course's breadth of theoretical concerns to speak to intellectual concerns outside the social sciences, my grasp of these other literatures was admittedly tentative, and I wanted students to identify some common literary focus in the syllabus. Thus, I looked to incorporate urban studies' multidisciplinary learning through other means.

IT offered this other means. Like many other colleges, Vassar has recently expanded and upgraded its use of IT to facilitate pedagogy in several ways. Internet and e-mail connections are standard in libraries and student dormitories (most students live on campus). Students can also find computer labs and instruction in a variety of IT skills, from basic word processing to advanced web authoring. Most recently, Vassar's library joined the college's IT strategy through newly constructed "electronic classrooms" set up for instruction and networking with class-size numbers of state-of-the-art computers. Vassar's library and IT staffs have traditionally made themselves available to facilitate instruction and research, but for this class I found a new way to collaborate with them. In the semester before my Urban Theory course I joined a librarian, IT coordinator, and student to represent Vassar at a Mellon-funded pedagogical conference ("Teaching Across Technopedagogy 2000") specifically designed to facilitate collaboration and

discussion across these conventionally distinct educational constituencies.[2] There the four of us (henceforth, "my collaborators and I") worked on my Urban Theory course as our model project.

Thankfully, for an event filled with four educational constituencies anxious about their grasp on "technopedagogy," the conference successfully demystified what counts as "information technology." IT is simply that: technology to retrieve, process, and analyze information. Not to be confused with high technology, IT is ubiquitous throughout educational institution. Students and teachers readily think of PCs, the World Wide Web, and Census databases as IT, but why not librarians? Their services are some of the most underrated yet valuable "technologies" that a college provides; Vassar's new effort to expand library services into the realm of classroom tutorials offers a valuable pedagogical opportunity as both a means (to support particular assignments) and an end in itself (to become information literate). Similarly, why not view classroom training and exercises in research methods, even "low-tech" ones, as IT? Most notably, sociology and urban studies have at their disposal the field research methodology. Other useful technologies of knowing include visual (tours, slides, films, etc.), interpersonal (role plays), and intrapersonal (studying oral histories, etc.). By leveling the status of these various ITs, the range of feasible "technologies" for the classroom expands, and not all of them require the services of professional support staff like librarians and information technologists.

COURSE OBJECTIVES

The discussion at the conference helped me rethink my pre-existing goals for the course. My collaborators and I began to conceive of how various ITs might not only provide *media* for the instruction and performance of assignments but also *models* for different kinds of knowledges used in learning generally and urban studies specifically. Accordingly, my goals and design for the course moved beyond organizing substantive themes and debates in urban studies (say, as a history of ideas) and encompassed opportunities to practice different knowledges through IT. Below, I describe the latter as latent goals, so named because I did not necessarily articulate these to the students in the class for fear of invoking technology anxiety. First, I describe my manifest

goals, those that I explicitly stated directly to students in the course description, syllabus, and first day of class.

Manifest goals

The first manifest goal was to examine central debates in urban studies: What is the influence of the built environment on social order? How do local and micro phenomena affect urban and macro phenomena? Are "urban" phenomena *sui generis*, or can they be attributed to other social properties (and if so, why discuss the "urban" at all)? I sought to cast these debates in ways that would be useful to all the approaches of urban studies majors. As I described earlier, teaching the *history* of these debates was a secondary concern, one I conveyed by scheduling these debates in their historical sequence.

My second manifest goal was to develop students' capacity to theorize urban phenomena. In part, this represents another debate in urban studies: How can theory be used to address phenomena, such as cities and neighborhoods, that are arguably too diverse and distinct for traditional generalization? However, I sought to teach theory as a more general process of deducing hypotheses from previous theories and debates, inducing generalizations from empirical data, and reflecting on the relevance of one's findings to other theories and social concerns. Seen this way, teaching theory as a skill means focusing less on the correctness of their the final "answers" and more on training them to move from data to answers and to think critically about this inductive process.

Latent goals

My first latent goal was to structure opportunities for students to engage diverse technologies in ways that would resonate with the diverse intelligences displayed by students. Not only would this fit the multidisciplinary nature of urban studies, but it would also allow students with less confidence in their linguistic and logical-mathematical skills, the "serious" skills rewarded by traditional pedagogy (Gardner 1983), to engage the material and explore how they might relate to urban theory. By structuring several exercises corresponding to different

kinds of intelligences, these students would ideally find some way(s) of practicing knowledge that appealed to them. Ideally, this would motivate them to perform well on at least some assignments. This selective motivation, or what Renzulli (1983: 60) calls "task commitment," implies the need for providing students choice of curriculum and, within courses, assignment tasks.

Second, the multiple uses of technologies would offer students another way to think critically about the theories and debates they encounter. In a traditional lecture, the instructor teaches critiques much the same way as the initial work being critiqued: through one-way transmission that students assimilate and subsequently regurgitate. While telling the class "what is wrong" with a particular idea or work has its place, I wanted students to interrogate important works by thinking and practicing across of works, theories, and methodologies with the use of IT. An example will illustrate.

A core debate the class examined was whether the built environment matters for the vitality of the neighborhood, as argued affirmatively by Jane Jacobs (1961) and negatively by Herbert Gans (1982, 1962). After reading and discussing these important works and examining images of the respective neighborhoods they described, Greenwich Village and Boston's West End, we practiced thinking across them in two ways. First, students read a response by an architectural theorist (Broady 1972) whose *practical* concerns were a step removed from the *qualitative empirical* analyses offered by Jacobs and Gans; this reading appealed to students interested in architecture and planning. Second, students then practiced *quantitative empirical* analysis by examining census data for Greenwich Village and the West End. Their assignment asked them to derive descriptive hypotheses for both authors, identify and gather the relevant Census data, and decide whether the data upheld the authors' competing claims. Students discovered for themselves many critical points, for example, how Jacobs argued for the built environment's influence out of a setting of relative social homogeneity (i.e., a factor that Gans claimed was decisive), as well as how many of the authors' qualitative arguments could not be reduced to Census indicators.

A third latent goal was not related specifically to IT, although IT certainly helped accomplish it: to build an esprit de corps among majors in the urban studies program. One reason was to give students an extra sense of morale that could sustain them through a demanding course and major. However, students also would benefit educationally from working together and encountering the different perspectives each brought from their individual backgrounds and particular concentrations in the program (Gerlach 1994). In part, esprit de corps was achieved through the course's context for urban studies majors, since it predominantly contained sophomores at a similar stage of progress through the program. I also built it into the course by letting students work collectively (but in most cases turn in separate final products) on the technology-intensive assignments. Exams were take-home and so also permitted collective preparation. Students could benefit from collective reflection and discussion, and the collaborative knowledge they produced would ideally be synthetic, evaluative, and critical (see also Sernau 1995 on collaborative learning).

OPERATIONALIZING TECHNOLOGY IN THE CLASSROOM

My Vassar collaborators and I agreed that technologies should be used to complement, not replace, what we considered the heart of the class: discussions and lectures. This principle moved us away from the distance learning model. Concepts and debates would first be introduced through traditional forms of face-to-face communication, so that students would have a familiar way to follow up, ask for clarification, and discuss the topics in a setting accessible to all. Classroom and assignment technology would be used in group assignments after discussions and lectures, as a way to exercise and employ the concepts and debates presented in class. IT would also be used for students' utility, via an online syllabus and a classroom e-mail listserv that could be accessed outside of class. As the student representative told me, simply offering these would provide most of the technological value for Vassar's Internet-savvy students.

Although we sought to keep the use of technology in the background of the class as much as possible, some of the assignments would require students to learn skills like archival research,

analyzing census data, and web authoring that might give some technology anxiety. We chose these occasions strategically based upon two considerations. First, if students might need these skills in other settings, then we would think favorably about requiring them.[3] Second, we would incorporate training sessions into the course schedule, either in class or the library's electronic classroom, to be taught by the librarian or information technologist.

Organizational technology

Some of the most valuable technology bore no relation to the substantive topic of the class. Chief among these was the online syllabus, which let students access the class schedule, assignment instructions, online data for some of the assignments (e.g., Census data spreadsheets), and electronic readings. By the first day of class, the syllabus contained extensive detail about the requirements (e.g., step-by-step instructions, examples, and links to assignments from other students illustrate what I did and did not expect) and the readings (e.g., one or two questions to guide students' reading), thereby allowing me to forego much logistical discussion in class. My rationale here is that students are rational beings, and like everyone else their rationality is bounded by the limited information provided them (March and Simon 1958). If they do poorly on an assignment in relation to their academic potential, I assume they have made a rational decision about their priorities for the assignment and the class in relation to other demands facing them, *provided* I have given them sufficient discussion and lecture about the ideas being tested, sufficient detail about what is required, and sufficient time to prepare and discuss the assignment. The online syllabus is ideal for the last two tasks, since its electronic format makes for a less daunting and more convenient read than a thick print-out handed out on the first day of class. It also allowed me to make last-minute schedule adjustments, which I could then announce to the class.

Since my students all had e-mail accounts, I set up and subscribed them to an e-mail listserver that distributed electronic messages to everyone's account. I used WebBoard, a web-browser based application that not only served as a regular listserv but also archived all messages on the World Wide Web and allowed me to add and delete subscribers when enrollment

changed.[4] I found this technology extremely valuable for allowing me to continue or clarify comments in class and announce logistical changes. Although the students did not use the listserver to discuss substantive topics amongst themselves as I had hoped, they did use it when they needed to share research materials as well as anxieties over pending deadlines.

Since the first assignment required original field and archival research on Poughkeepsie (see "Assignment technology," below), my collaborators and I constructed a Poughkeepsie Research Archive website that students could consult for archival references. This website offers a central location for library call numbers, historical websites, and electronic documents of social scientific and historical research on the Poughkeepsie area conducted by outside researchers, Vassar faculty, and students (e.g., senior theses, original research papers). This invaluable kind of resource would have been impossible without the collaboration of the librarian and information technologist.[5]

Classroom technology

I viewed classroom lecture, discussion, and chalkboard as "information technologies" with particular strengths. As I stated earlier, they were used to introduce topics and allow students immediate clarification. They were also ideal for describing and diagramming theoretical models of processes and structures where interrelated phenomena occur simultaneously at different levels of analysis: the relation between micro-competition for resources and urban morphology (urban ecology), the relation between intraurban social conflict and interurban competition for capital investment (urban political economy), etc. They also conduct normative discussions about social justice, preferences for particular landscapes, the relevance of particular topics to students' lives, and so on. However, Urban Theory entails other knowledges that demand different intelligences than the kinds exercised by these traditional ITs.

Most notably, urban theory lends itself to visual, spatial, and aesthetic knowledges that must be seen. For instance, the planning debate about the ills and virtues of density and diversity in modern cities was conveyed visually. Illustrating the con side was a 1939 video, "The City" (by the American Institute of Planning, with commentary by Lewis Mumford), that visualized

and narrated then-hegemonic ideas and Progressive assumptions about city planning (starting from the New England, through the "fall" of the modern industrial and urban center, and ending with the regional city). On the pro side, slide of contemporary Greenwich Village illustrated the simultaneity of vital dynamics that Jacobs found in its neighborhoods: multiple uses, mixed age of buildings, people on the street, etc. Slides of modern examples (e.g., Poughkeepsie's urban renewal landscape, New Urbanist communities) capped off this discussion.

Assignment technology

Visual analysis was also combined with social and spatial analysis through observational fieldwork, a low-tech information technology that the class used on the first assignment. The entire class read the Chicago School's theories of zones of transition (Burgess 1925) and ethnic enclaves (Zorbaugh 1929) and then took a fieldtrip through Poughkeepsie, New York (Vassar's hometown) to view local examples and experience the spatial relations within the city center. Also during this trip, they were asked to select a particular neighborhood to research in the field and archives (using the Poughkeepsie Research Archive, described earlier). Their assignment had groups of 2-3 students emulate Zorbaugh's fieldwork methods in their selected neighborhood, replicate his research question, "Does community exist?" and evaluate his answer vis-à-vis alternate definitions of community (Hawley 1950; Hunter 1997) and their own findings. Students quickly discovered they could hardly reproduce the deep ethnographic research that Zorbaugh conducted over two years, but this shortcoming proved useful in getting them to ponder how differences in kind and quality of data lead to different findings. By being asked to find community (or not) based on *their own* data, students learned first hand about fieldwork's validity and reliability while having an empirical basis on which to critique Zorbaugh's theory of community.

The second assignment has already been introduced: students were asked to construct descriptive hypotheses for Jacobs and Gans' arguments about the influence of the built environment on neighborhood vitality and then evaluate these using census data spreadsheets Greenwich Village and the West End. Prior to the assignment, several student assistants and I

entered selected Census tables into spreadsheet format for 1950-90; these were formatted for Microsoft Excel, standardized wherever possible, and uploaded to the online syllabus for student access. Urban Theory students began their assignment with a tutorial on the basics of spreadsheet data analysis at the library's electronic classroom, where each student had their own computer and spreadsheets to work with. Then, working in groups of 2-3, students constructed the hypotheses, located and collected the relevant Census variables, constructed descriptive statistic tables for each hypothesis, and then evaluated whether the data upheld the authors' competing claims.

Admittedly, this assignment was perhaps the least successful for the entire course for at least three reasons. First, spreadsheet data analysis is hardly a "transparent" technology that is intuitively grasped through untrained user interface, the way the Internet and even web-authoring software have increasingly become (see also Turkle 1995: 36). Second, the assignment required a certain fluency with logical-mathematical analysis that could not be assumed for the many students who had yet to take a methods course; I eventually had to extend the assignment deadline to give students more time to work their way through the data. Third, even students with more logical-mathematical savvy were frustrated to find that many of Jacobs and Gans' ethnographic variables had no census indicators. However, their discovery provided a first-hand evaluation of the differences between quantitative and qualitative methodologies.

The third assignment used a low-tech IT, the role play, to let students creatively explore urban political economy's theories of intraurban social conflict and interurban competition for capital investment (Logan and Molotch 1987). Students divided into groups of five and assigned themselves one of five roles: (1) a corporate executive making a location (i.e., capital investment) decision, (2) a growth coalition representative from White Plains, a corporate headquarter suburb of New York City, (3) a rival growth coalition representative from Poughkeepsie, which historically fared poorly in corporate locations beyond IBM, and (4-5) two community representatives from these respective localities. The student playing the corporate executive additionally chose to represent one of a pre-assigned group of industries that varied by status and power in economic development, from a high-tech R&D branch with 100 high-paying jobs to a

garbage landfill. In the role play, students explored the intrapersonal dimensions of urban political economy's theories by improvising a negotiation for capital investment and following certain rules for particular roles: growth coalitions sought to outbid each other for the corporation with incentives of their choice; community representatives undermined the growth coalition's overtures by describing the political resistance they would enact; corporate executives could not respond to community protests, leaving the "dirty work" to local growth coalitions; and finally the corporate executive would announce where he or she would locate their industry and why. Lastly, students wrote individual 1.5 page briefs describing their character's goals and strategy, the executive's final decision, and the lessons the exercise provided about urban political economy's premises. This exercise utilized dramatic and interpersonal skills to let students see how conflict within localities and between rival growth coalitions reproduced uneven economic development at the macro scale (see also Crowdes 2000 for further discussion of intelligences stimulated by role plays). Encouragingly, students' briefs described very realistic outcomes.

The final assignment employed a high-tech IT, website construction, to combine original political economy research and semiotic analysis of a themed space. These dual analyses embody the symbolic economy methodology to the topic of themed spaces, those sites of culture and leisure that are increasingly prevalent in modern urban economies (Zukin 1996). This group-based assignment began with a tutorial conducted by the librarian on retrieving and evaluating materials from the World Wide Web for research. Students were also asked attend tutorials on web authoring conducted by the information technologist; these were made elective because some students already had these skills, and because students could designate from their group a web-designer that did not have to do "substantive" research. Then they constructed websites containing images of their themed space and three original essays: (1) the political economy of the space's construction, (2) a semiotic analysis of the space's themes and audiences, both intended and excluded, and (3) a discussion of the theoretical gains of juxtaposing the two prior analyses. Importantly, students were told not to incorporate links without their own framing and interpretation.

PROBLEMS ENCOUNTERED IN THE COURSE

As this paper suggests, my Urban Theory course had great ambitions for incorporating IT. Not surprisingly, this did not go off without a hitch. Here I describe the three kinds of problems I encountered.

First, the course and its many technologies, both high and low, required extraordinary preparation before the first day of class and/or the various assignments fell due. Only some of this preparation (e.g., coding and formatting Census data into spreadsheet documents) could be handled by undergraduate assistants and myself. Most of it entailed the expertise of outside collaborators, primarily the librarian and information technologist, as well as their ongoing participation in technology construction, maintenance, and training. Although these staff have long been underutilized in relation to their capacity to support classroom instruction, the Urban Theory course occurred in, and indeed contributed heavily to, a context of growing demand for their skills and energy. Very likely this problem will be repeated at other colleges where institutional expectations for incorporating newly acquired IT into pedagogy exceeds the capacities of support staff (Anderson 1994).

Second, introducing IT into the class makes technical difficulties and failures likely. Coding Census data and formatting it into spreadsheets alone caused innumerous headaches for me and my assistants, something researchers who format their own Census data might expect. One organizational technology my collaborators and I hoped to use was the Virtual Classroom, which gives students and instructors tiered access to electronic space for hosting websites and turning in written assignments in electronic form (e.g., as word processing documents). Late into the semester, we aborted this technology when password problems on the support side ran into technology burn-out on the student side. Hopefully technical problems will diminish the next time I teach this class, but it still raises an important lesson: incorporate high-technology into pedagogy incrementally and prudently.

This points to a third problem: the capacity and credibility students show for high-tech IT. Students demonstrated a vast range of high-tech skill levels, from rudimentary word

processing and e-mail capacity to fluency in website authoring. That this occurred at a prestigious private college that probably lies on the privileged side of the digital divide suggests this problem is endemic among undergraduate institutions. In my experience, undergraduates accept the consistent and varied employment of IT in a class that they think is "not about technology" only after five conditions have been established. First, students should be forewarned that the class will be technologically intensive; ideally, they should experience this first-hand *before* enrollment drop deadline. Second, IT training must be provided either through scheduled class training or sufficient time set aside for elective instruction. Third, students should be given at least some opportunities to choose either substantive or technological roles for assignments, which is easiest with group assignments. Fourth, the instructor should demonstrate that his or her pedagogical priorities rest with the substance of the class, not its pedagogical technology. Fifth, even after expressing such priorities, the instructor should nevertheless cheerlead continuously throughout the class for the use of IT, albeit not at the expense of denying problems and difficulties that come with IT.

I hope the number and demands of these conditions do not deter instructors from attempting new uses of IT in the classroom for two reasons. First, IT is not a monolithic entity, despite its usual "high-tech" connotations; in my class, it ranged from classroom discussion to website authoring. Seen this way, students and instructors' fluency with IT varies by degree, not kind, and with sufficient training and time a shared level of skill can at least be realistically strived for. Second, teaching and practicing multiple knowledges is imperative in a multidisciplinary field like urban studies, although there are other ways to do this besides using (even this broad conception of) IT. As sociologists advance in exploring alternate knowledges in the substance (e.g., Dumont 1995) and instruction (e.g., Alexander and Sullivan 1996) in their courses, perhaps our own "singular" discipline can contribute further to the pedagogical uses of, and concerns for, IT raised here.

NOTES

[1] This year, the urban disciplines represented by guest faculty in Introduction to Urban Studies were sociology, geography, education, anthropology, and environmental science.

[2] For further information, see the conference website at http://serendip.brynmawr.edu/talking/.

[3] At Vassar, introducing basic urban methods like field research and census data analysis in the Urban Theory course also has practical value, since the urban studies program has no core methods course of its own. Instead, students select a methods course from seven departments (from art to psychology) that might not teach urban-specific methodology, nor cover a shared set of methods.

[4] Another service WebBoard provides that I did not use was setting up electronic "conferences," i.e., listservs for sub-groups of subscribers.

[5] Currently the possibility of making the Poughkeepsie Research Archive permanent and regularly updated is being negotiated. The logistics first include finding a computer server to host the website and its many electronic documents. This in turn raises legal issues pertaining to copyright and public use concerns, since electronic copies of faculty's and students' original research (much of it unpublished) can be accessed and hypothetically plagiarized by anyone on the World Wide Web. While current and future students and faculty can grant explicit copyrights and permission for release, the legal question remains whether these are implicit for past faculty and students. (This became a minor issue at Vassar recently when news journalists requested and were denied access to the senior thesis of Rick Lazio, Vassar alumnus and 2000 senatorial candidate for New York.) One solution would be to restrict electronic access to these documents to computers with Vassar IP addresses only.

REFERENCES

Alexander, Susan M. and Katherine Sullivan. 1996. “Teaching ‘In Tandem’: Combining Sociology With Theater to Create an Interdisciplinary Classroom.” *Teaching Sociology* 24(4): 372-377.

Anderson, Bryan. 1994. “The Pedagogy of Information Technology: The Faster We Go the Behinder We Get.” *Thresholds in Education* 20(2-3): 18-23.

Broady, Maurice. 1972. “Social Theory in Architectural Design. Pp. 170-185 in *People and Buildings*, edited by R. Gutman. New York: Basic Books.

Burgess, Ernest. 1925. “The Growth of the City: Introduction to a Research Project.” Pp. 47-62 in *The City*, edited by R.E. Park, E.W. Burgess and R.D. McKenzie. Chicago: University of Chicago Press.

Crowdes, Margret S. 2000. “Embodying Sociological Imagination: Pedagogical Support for Linking Bodies to Minds.” *Teaching Sociology* 28 (1): 24-30.

Dumont, Clayton W., Jr. 1995. “Toward a Multicultural Sociology: Bringing Postmodernism into the Classroom.” *Teaching Sociology* 23(4): 307-320.

Gans, Herbert. 1982. *The Urban Villagers.* 2d ed. New York: Free Press.

_____. 1962. “City Planning and Urban Realities.” *Commentary* 33: 170-175.

Gardner, Howard. 1999. *Intelligence Reframed: Multiple Intelligences for the 21st Century.* New York: Basic Books.

_____. 1983. *Frames of Mind: The Theory of Multiple Intelligences.* New York: Basic Books.

Gerlach, Jeanne Marcum. 1994. “Is This Collaboration?” Pp. 5-14 in *Collaborative Learning*, edited by K. Bosworth and S J. Hamilton. New Directions for Teaching and Learning Number 59. San Francisco: Jossey-Bass.

Hawley, Amos H. 1950. *Human Ecology*. Ronald Press, 1950.

Hunter, Albert. 1997. “Community Mislaid: Shifts in Rhetoric and Research on Community from the Chicago School to Today’s Communalism.” Paper presented at the annual meetings of the American Sociological Association, August 9-13, Toronto, Canada.

Jacobs, Jane. 1961. *The Death and Life of Great American Cities*. New York: Vintage.

Logan, John and Harvey Molotch. 1987. *Urban Fortunes.* Berkeley: University of California Press.

March, James G. and Herbert A. Simon. 1958. *Organizations*. New York: John Wiley.

Renzulli, Joseph. S. 1981. "What Makes Giftedness: Reexamining a Definition." Pp. 47-54 in *Psychology and Education of the Gifted,* edited by W. B. Barbe and J.S. Renzulli. 3d ed. New York: Irvington.

Sernau, Scott. 1995. "Using a Collaborative Problem-Solving Approach in Teaching Social Stratification." *Teaching Sociology* 23(4): 364-373.

Turkle, Sherry. 1995. *Life on the Screen.* New York: Touchstone.

Vaughan, Ted R., Gideon Sjoberg and Larry T. Reynolds (eds.). 1993. *A Critique of Contemporary American Sociology.* Dix Hills, NY: General Hall.

Zorbaugh, Harvey W. 1929. *The Gold Coast and the Slum.* Chicago: University of Chicago Press.

Zukin, Sharon. 1996. "Space and Symbols in an Age of Decline." Pp. 43-59 in *Re-Presenting the City*, edited by A.D. King. New York: New York University Press.