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## Deep Reading, Cost/Benefit, and the Construction of Meaning: Enhancing Reading Comprehension and Deep Learning in Sociology Courses

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*Teaching Sociology* 2008 36: 125

DOI: 10.1177/0092055X0803600203

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## DEEP READING, COST/BENEFIT, AND THE CONSTRUCTION OF MEANING: ENHANCING READING COMPREHENSION AND DEEP LEARNING IN SOCIOLOGY COURSES\*

*Reading comprehension skill is often assumed by sociology instructors, yet many college students seem to have marginal reading comprehension skills, which may explain why fewer than half of them are actually doing the reading. Sanctions that force students to either read or to pay a price are based on a rational choice model of behavior—a perspective that many students seem to bring with them. However, deep reading—reading for long-term retention of the material and for comprehension at a level that can be perspective-transforming—involves constructing meaning as one reads. Students need help developing reading strategies that enhance this process. Moreover, cost/benefit coercion of reading does not necessarily enhance construction of meaning or deep-learning; indeed, it may reward minimalist or surface reading. This essay is an excursion into theory on deep learning and the implications of that theory for engaging students in reading. An assignment based on multiple intelligences and fostering reading comprehension is suggested and some initial data are provided regarding possible success of this strategy.*

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READING IS A COMPLEX PROCESS to which sociologists have paid little attention, despite the fact that we do a great deal of it and expect our students to do it before coming to classes. Although children learn the *mechanics* of reading in the early elementary grades, reading with understanding and meaning is a skill that needs to be nurtured over many years. The emphasis on “reading to learn,” that is, reading with a focus on *comprehension and retention*, begins in earnest in upper-elementary and middle school. Even for those students who were highly successful in high school, however, reading at the college level can challenge students beyond their training. Part of the problem is that reading-to-learn in high school is often reading for factual information to regurgi-

tate (surface learning) rather than reading to make meaning and construct a strong argument (deep learning). Certainly in sociology we expect students to read the texts, articles, and monographs so we can discuss them in class. For those who become our majors, we hope they develop a lifelong passion for reading, scouring literature before making decisions or before undertaking research projects of their own. Still, do we have confidence that they have literacy skills which include reading for *deep learning*?

Collegians (even professors) can improve their strategies for enhanced efficiency and comprehension. It should be little wonder that, if students do not learn good strategies, they may avoid reading or may comprehend a text poorly. When given an assignment, some students feel they have met their obligation if they have forced their eyes to “touch” (in appropriate sequence) each word on the pages assigned. How can we entice students to read the materials we assign, and how do we help them develop

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strategies for deep comprehension and retention of that material? Are there subtle ways we can both prod them to read and help them develop literacy skills—*without* spending our own precious time explicitly teaching “reading”? Can *extrinsic* sanctions—positive and negative—really lead to an *intrinsic* motivation: deep reading?

College professors, like teachers at all levels, can play an important role in their students’ success by explicitly addressing issues of reading comprehension and the use of reading strategies. However, we first need to understand some basics on how “good readers” comprehend. What processes are involved in making sense of printed materials? What do “good readers” do as they read? A useful first step for each faculty member is to employ metacognitive reflection; that is, to actively think about his/her own reading processes and strategies (Schoenbach et al. 1999). David Perkins (1999) calls metacognition “knowledge and management of one’s own cognitive processing” (p. 85)—thinking about how we process information. Professors might read something, and then consider what is going on in their own heads when they read and retain an especially interesting or challenging piece. You may ask, for example, what am I thinking about even as I read this essay? If you want to remember ideas in this article, what mental processes are you using this minute to make the ideas stick and to create meaning that matters to you for the long term? What do you do with the words on this page to make the ideas they represent stick in your own brain? Can we help students learn these strategies (Ciardiello 2003; Hock and Mellard 2005; Schoenbach et al. 1999)?

A good reader forms visual images to represent the content being read, connects to emotions, recalls settings and events that are similar to those presented in the reading, predicts what will happen next, asks questions, and thinks about the use of language. One of the most important steps, however, is to connect the manuscript we are reading with what we already know and

to attach the facts, ideas, concepts, or perspectives to that known material. Later we recall it by referring back to its association with what we had previously mastered. These are some of the ways that successful readers make sense of textual material (Coutant and Perchemlides 2005; Fordham 2006; Guthrie and Alvermann 1999; Hurst 2005; Jensen 1998; Leveen, 2005; Spargo 1977; Tovani 2005). In the research on memory, this is called “semantic memory” (rooted in meaning) as opposed to “episodic memory” (tied to a specific joke, gesture, episode, or mnemonic to aid recall) (Tagg 2003).

Few of us are explicitly taught reading comprehension strategies. Many young people simply discover them by trial and error; others never do. Many of us are not consciously aware of the metacognitive processes by which we remember what Weber had to say when he wrote about bureaucracies. We developed our own strategies and they worked; thus, we felt successful and we continued in the educational system. However, what about those students who did not intuitively or accidentally discover successful strategies? These students are often in our classes hoping to be successful and needing help with comprehension techniques.

Recent research suggests that many college students do not read with effective comprehension strategies and, in fact, do not always complete reading assignments (Applegate and Applegate 2004; Kuh 2004; McCarthy and Kuh 2006). A national survey of 155,000 college students at 470 colleges and universities revealed that 44.5 percent spend less than 10 hours per week in any sort of class preparation; nearly 80 percent spend less than 20 hours (Kuh 2001; Tagg 2003). This means that four out of five students spend an hour (or less) of study time for each hour in class, and this includes time spent writing papers and studying for exams. Even this number may be high. In a study specifically of students in sociology courses in one of the largest undergraduate sociology programs in the

country, 37.7 percent of students said they spend less than five hours a week studying for all classes and 69.6 percent spend less than 10 hours per week (Delucchi and Korgen 2002). While interviewing students, we were surprised by the frankness with which many college students—including some very successful students—admit that they do not read their assigned materials at all. Howard (2004), reporting specifically on surveys in introductory sociology courses, reports that only 40 percent “always or usually” read the textbook. Even among the students who eventually earned an A or B, just over half said they always or usually read the text.

An important question for instructors, then, is how to make reading experiences meaningful so that students will want to learn via the written word and will develop an appreciation for the various strategies that good readers utilize. One strategy that college faculty use to encourage their students to read assignments is to give quizzes on the assigned readings; however, such quizzes often encourage college students only to learn key words and other concepts at the knowledge level of Benjamin Bloom’s Taxonomy (Bloom 1956). In short, they encourage surface learning based in episodic memory—short-term memorization for a day or two—rather than deep learning that is transformative of one’s perspective and involves long-term comprehension (Tagg 2003). If the instructor hopes for students to come away with the “big ideas” and the major concepts, there may be approaches other than quizzes that can be more successful. This essay examines issues of reading comprehension in light of current theory on “deep learning” and offers one approach that ensures that students read the materials while simultaneously introducing them to strategies for deeper comprehension. Noteworthy is that students may learn new reading strategies from this assignment without sociologists using class time to teach those strategies explicitly.

## LITERATURE REVIEW

Literature on the techniques of learning reading and on reading comprehension from preschool through high school in the educational subfield of reading is extensive (Baer 2005; Bomer 2006; Courtant and Perchemlides 2005; Fordham 2006; Grammill 2006; Pardo 2004; Santa 2006; Tovani 2005). However, only a few articles on reading among college students are available (McCarthy and Kuh 2006; National Education Association 2005a, 2005b; Roberts 2006; Spargo 1977; Williams 2004). Most of these articles address the amount of reading by collegians rather than investigating reading comprehension, and virtually none of the latter has made its way to sociological venues.

In sociology publications, there is almost nothing published in the way of empirical or theoretical analysis of reading in sociology courses. There is much on writing: in the past three decades there have been three commercially published writing guides for sociology students (Bart and Frankel 1986; Johnson et al.; Sociology Writing Group 2001); the ASA Teaching Resources Center has published a monograph for faculty on *Writing in the Undergraduate Sociology Curriculum*; and there have been 54 articles published in *Teaching Sociology* since 1980 on writing in sociology courses (Stokes, Roberts, and Kinney 2002). However, since January 1986, *Teaching Sociology (TS)* has published only two articles specifically on reading in sociology courses, both occurring in the same issue in 2004. A third article mentions “critical reading and writing” in the title, but the analysis is entirely about student essay writing (Althaus and Darnall 2001). Three other recent articles do not focus explicitly on reading as its topic, but they offer very specific strategies for comprehension when reading a professional research article (Bordt and Pager 2005; Purvin and Kain 2005; Yamane 2006).

Bordt and Pager (2005), in particular, focus on the connections to deep learning. Yamane's analysis is about assignments that get students ready for in-depth class discussions, and his "course preparation assignments" also focus on learning that goes beyond surface memorization to engagement of higher-order thinking skills. None of these articles is about reading *per se* or is based on the scholarly literature regarding reading comprehension, but they do each offer suggestions consistent with this line of research.

The only *TS* article in the past 20 years devoted explicitly to reading was an analysis by Howard (2004) of the use of "Just-In-Time" quizzes—taken by students on-line no later than two hours before class meets so the instructor can use the information for class preparation. These did seem to encourage reading. Howard, citing Rosenblatt, points out that effective reading requires that "readers construct knowledge as they bring their own input to the text" (p. 385). We think Howard is correct about this, but we are less sanguine that any form of quiz, and especially objective quizzes, will enhance that kind of reading. Moreover, Howard points to the heavy time commitment that such quizzes require. While his innovation is very interesting, it seems to us to be only a first step.

Lewis (2004) discusses student reading in an article describing "book clubs" for students in which the students read non-analytical narratives from various points of view regarding experiences with mental illness. Students in this class were highly motivated to read these essays because they are personally relevant, are written in an engaging narrative format, and are processed in small group "book clubs." The approach seems especially workable in upper-level courses with an engaged population. The essay tells us less about how to help students connect to and comprehend readings that are not relevant to their immediate personal experiences and are more analytical in nature.

A very incisive analysis of reading com-

prehension in the reading literature was a study on metacognition and reading at the high-school level by Schoenbach et al. (1999). Working with students at Thurgood Marshall Academic High School in the San Francisco Bay area, the authors found that reading is a complex mental process that involves making meaning by making connections. Experienced readers develop mental representations of the text that provide frameworks for understanding new material. For example, while reading a novel about the sea, a reader may visualize events in an ocean-side village that is familiar to her, making the story more memorable. It embeds the events and ideas in semantic memory. Reading involves problem solving; the reader makes sense from the words on the page as she/he relates new materials to pre-existing ideas, memories, and knowledge. Good readers are mentally engaged, motivated, and strategic in monitoring their reading (Sousa 2006). The question is how to create that disposition.

#### THEORY, DEEP LEARNING, AND READING FOR MEANING

What theoretical frame helps us make sense of student inclination or resistance to read the assigned material? First, deep comprehension reading is connected to research on deep (versus surface) learning. John Tagg (2003) offers a rational choice perspective on why students make many of their choices. He suggests that students often like multiple choice tests (including objective-style quizzes) precisely because these enhance surface learning which can be accomplished with surface reading and "episodic" memory. These forms of evaluation allow one to pass tests and courses with minimum effort. Deep learning—the long term and perspective-transforming learning that we aspire to instill in our students—requires engagement with the material and connections to semantic memory. However, the student culture at many colleges stresses degrees, credits, and credentials as the long-term objective. Delucchi and Krogen (2002)

found that 73.3 percent of the students enrolled in sociology courses at one university would take a course knowing they would learn little or nothing if they thought they could earn an “A.” Deeply engaged mastery of the material is not valued and is therefore not pursued by the majority of students (Horowitz 1987). The issue becomes how to get the maximum gain (course credits; a respectable GPA) with minimum investment of effort. Objective tests often allow one to skim material a few days before an examination looking for the kinds of facts, definitions, concepts, and other specific information that the particular instructor tends to stress in examinations. Those facts and definitions are then put into one’s episodic memory—and soon forgotten (Tagg 2003). The goal of passing a course or of achieving a certain GPA is enhanced with minimal effort when evaluation of student work does not require investment into the essence of the argument or the meaning of the connections the author is making. If analysis, synthesis, or evaluation is not required, reading at that deeper level will not occur.

Tagg discusses the rational choice process by which students allocate their time—seeking maximum gain with minimal effort. Students who buy into this definition of college life engage a cost/benefit analysis, and reading the material may be an *unwise* use of valuable time if there are no adverse consequences. The two most common sanctions are poor performance on quizzes or embarrassment during class discussion. From the student rational choice perspective, superficial skimming of the material makes sense, as it allows one to minimize those costs. Clearly not all students seek only minimal engagement in academics. (This was not the case for most of us who continued in academia as a career choice, for we found passion in the engagement with ideas and inquiry.) In short, a rational choice approach to the curriculum often leads to surface learning, and that does not necessitate deep reading for meaning.

It is critically important to understand that

there are many forces at work in fostering this rational choice approach—it is not a matter of lazy or ill-willed students. First, anti-intellectualism in the society is rampant, and this “leaks” into college life and has done so for roughly two centuries (Horowitz 1987). Second, surface learning via minimalist effort and simplistic memorization is often reinforced in many (not all) high schools. Third, the structures and bureaucratic reward systems of universities reward and reinforce this simplistic cost/benefit process in a host of ways (Adams and Balfour 2004; Roberts and Donahue 2000; Seeley 1969). The McDonaldization of the academe—simplistic measures of quality and of competence reduced to efficient scores and numbers—foster surface learning. Fourth, these issues and trends are tied to the larger matter of modernity. Max Weber argued that modernity itself involves a movement to rationalization of the entire social system, and this has moved beyond substantive rationality into a technical rationality that focuses on mastering minute technical skills at the expense of understanding the meaning of the big picture (Adams and Balfour 2004). So the process is rooted in macro aspects of society that seep into the classroom. Much of the writing on deep learning examines this problem of how our culture and our academic structures and norms undermine deep learning, and some authors have focused on amelioration of the problem (Palmer 1998; Tagg 2003), but institutional reform remains beyond the scope of this essay. The important point here is that it is unproductive to blame either students or public schools for a narrow rational choice focus on technical competence; we in academia have done our share to contribute to this stress on getting the best grade with the least understanding of the larger meaning. (True/false and multiple-choice tests, Tagg points out, reward learning that entails out-of-context, superficial memorization of concepts.)

To be fair to rational choice theory in this discussion, we must recognize that it does

acknowledge intrinsic motivations (i.e. internal rewards, such as self-esteem) for behaviors; however, rational choice theory never makes clear how *extrinsically imposed sanctions* can evolve into *intrinsic motivations*. Can extrinsically imposed costs and benefits motivate one to seek meaning? To some extent, if we want reading-for-meaning and long-term retention of the ideas, we must find ways to get students to seek meaning—to become implicit social constructionists rather than exchange theorists. They must find intrinsic meaning in reading rather than seeing it as something they must “get through” in order to receive the reward at the other end of the tunnel (course credits; a degree). As a punitive technique to punish those who do not read, quizzes do not seem to be an effective solution. Indeed, quizzes are based on and reinforce the rational choice approach that is part of the problem. Will simply increasing the costs or benefits ultimately lead to *seeking meaning*? It seems contradictory. Reading for meaning involves engagement for its own sake and embedding ideas in *semantic memory*. Deep learning involves a transformation in perspective, and “deep reading” seems to require a transformation in attitude toward learning itself. How one creates that change is a huge challenge, but it is clear that the purely punitive approach is not working. We suspect that reading-enticement assignments need to be consistent with the anticipated outcome. As Martin Luther King, Jr. noted regarding all change, the ends and the means must be consistent, for *the means must be the end in process* (King 1957).

What we all want in our classrooms are students who seek *meaning* in the reading so that in the process of dialogue and exchange, *knowledge can be socially constructed*. Goldsmid and Wilson (1980) also remind us that in the classroom, our goals, our teaching methods, and our method of evaluation must be consistent. Coherence between means and ends contributes to deep learning—long-term and perspective-transforming engagement. The methods we

use to entice students to read must also be consistent with the long term objective.

If there are many factors contributing to superficial reading, there are also enticements to deep reading. First and quite obviously, intrinsic interest in the material is a critical factor in motivation for deep reading, but we cannot be sure that our students will be intrinsically interested in that which fascinates us. A second factor, curiosity, can be enhanced when professors make comments about the forthcoming assignment and why it is interesting or why it is relevant to important issues the class has been exploring (Roberts 2006). Third, deep reading is enhanced whenever readers come to see connections to their own lives, their emotions, or their future ambitions. If the reader finds that the textual material illuminates something already experienced, then motivation to deeply engage the reading is heightened. Further, if students engage in deep reading, they often find connections between concepts and constructs in different courses, and this is stimulating and interesting. Fourth, deep reading embeds ideas and skills in one’s semantic memory rather than in episodic memory, which actually makes it easier to remember the course material over time. Once they have learned to focus on deep learning, students may see an instrumental value to it as well as an intrinsic value. The task of learning becomes more rewarding, enjoyable, and long term. Fifth, if the readings themselves elicit and require “perspective taking”—a process that is at the very core of deep learning (Roberts 2002; Tagg 2003)—students will find that they become more deeply engaged. Finally, if students know that the evaluation process for the course is going to stress higher order thinking skills—analysis, synthesis, and evaluation—then they realize that they simply must read deeply. If texts and papers allow the student to be successful with only rote memorization (knowledge and comprehension) there is little enticement to read deeply.

The important point is this: there are many ways to connect to and make sense of

reading material, as we know from the literature on learning styles and multiple intelligences. Sociologically we might say that there are many ways in which one may construct new meaning. Deep reading is much more likely if students can employ a learning strategy that is compatible with the reader's own cognitive style for processing new information (auditory, visual-verbal, spatial, kinesthetic, and so forth). We cannot impose a particular style for processing meaning on students; we can only help them find ways to do that. A method for helping students connect to reading by using their own best strategies is discussed below.

### THE CONTEXT AND METHOD OF THIS PROJECT

An inquiry project developed by the first author examined the reading habits and attitudes of college students at a liberal arts college of about 1,000 students located in the Midwest. This is not a random sample of collegians, for the college has competitive admissions standards, roughly half of the students having been in the top 10 percent of their high school graduating classes. This made some of the findings even more important, we believe, for if strong students are not reading with good comprehension, then clearly there are many other collegians who are not benefiting from reading the assigned materials. This may be in large part because their reading comprehension skills are quite weak.

The project is still underway, but the data collection has involved a qualitative survey at the beginning of several of the classes, an end-of-course written survey, and post-course interviews of students who had been enrolled in the classes, conducted by undergraduate student research assistants (to make the process less threatening).

Forty students (16 males and 24 females) were surveyed initially. When asked "How would you describe yourself as a reader?" student responses varied from "I am a voracious reader" and "I love to read" to less positive self assessments: "I don't read

unless I have to," "I am an extremely slow reader," "I am not very good at reading," "Reading is one of my least favorite things to do," and "I get easily distracted when I'm reading." Again, these were from students who were enrolled at a highly selective college.

Students listed their weaknesses in reading in three major areas: reading too slowly, getting distracted, and remembering only a small portion of the reading material by the time they completed the assignment. When asked specifically about reading in college courses, students mentioned the difficult vocabulary and the problem of staying interested in very long reading assignments that often become "boring." Some, but not all, of the college students surveyed were aware of various reading comprehension strategies such as re-reading, highlighting, taking notes, creating visual representations, writing a journal, and connecting personally to the reading in other ways. The challenge was how to strengthen students' reading comprehension.

#### *Reading Responses: An Active Reading Assignment*

The first author, whose specialty is reading, designed an assignment based upon research in the areas of (1) reading comprehension and (2) divergent "learning styles"<sup>1</sup> (Kolb 1984; McCarthy 1987; McCarthy and McCarthy 2005) or "multiple intelligences" (Armstrong 1993; Campbell, Campbell, and Dickson 1999; Gardner 1983, 1993, 2000). Since students learn in a variety of ways, it makes sense to have assignments that allow students to comprehend and express their learning style in a manner that is consistent with their mode of learning. Quizzes do not do this. The key to this alternative assignment was to help students learn a variety of strategies to *connect* with the reading (hopefully associating it with something they already knew and to embed ideas in semantic learning). The idea was also to

<sup>1</sup>An on-line learning styles inventory is available at <http://www.engr.ncsu.edu/learningstyles/learningstyles/ilsweb.html>.

encourage readers to use more than one type of the “reading responses” during the term so they could discover some new reading comprehension/retention strategies. The assignment allowed students to respond to the written material and essentially summarize core issues in any one of six formats, each of which was based on one or more of Howard Gardner’s forms of “multiple intelligence” (Armstrong 1993; Campbell, Campbell, and Dickson 1999; Gardner 1983, 1993, 2000). These eight modalities are: (1) verbal/linguistic (verbal processing), (2) musical (pitch, rhythm, timbre), (3) logical mathematical (quantitative and/or categorization), (4) visual/spatial (mental visualization, organization of ideas in graphic or diagrammatic form), (5) bodily kinesthetic (hands-on activity), (6) interpersonal (interaction with others), (7) intrapersonal (introspective), and (8) naturalist (classification of natural world—which is less relevant to sociology).

For those interested in the issue of deep learning, helping students connect in deep ways to the reading is an important concern. For deep learning to occur, students must be making meaning out of the reading, and to make meaning, we must be cognizant of the way various individuals construct reality. To put Gardner’s model in sociological terms, these are eight ways in which people process information and experiences *in order to construct meaning*. If these are the ways in which people embed meaningful ideas so they can remember them, then our assignments should take seriously the fact that learning is multifaceted and should allow more than a single type of response to reading material (National Education Association 2005b).

In three education<sup>2</sup> and four sociology

<sup>2</sup>On this campus, there is no major in education, only education certification. All students major in a liberal arts field; roughly 25-30 percent of the students seeking elementary education certification also happen to major in sociology. Because the standards for admission to the education program are high, the education students are among the best students on the campus.

courses, students completed written reading responses for each reading assignment. The assignment follows:

Respond to the text in ways that help you master the material and that help me see that you are engaging the material and keeping up with the reading. There will be 29 dates when reading responses are due. You are expected to submit 25 reading responses, so on four occasions when you are swamped with other material, you do not need to submit a response (though I do still expect you to be able to discuss the readings in class). Do one of the following when there is a “reading response” due. (You can vary your approach to this assignment; you need not always use the same strategy.)

- a. *Connecting to the Text*: visualizing, questioning, responding (linguistic; intrapersonal)
  - Underline key ideas—mark in margins, make comments, put question marks, visualize concepts and ideas in your mind.
  - Then go back through your underlining and margin notes: write five “big” questions that represent key concepts in the chapter.
  - Answer at least two of the questions or write a commentary on why you think these are the core issues in this reading material.
- b. *Summarizing the readings and visualizing the key ideas* (visual/spatial, logical mathematical, and/or linguistic)
  - Do *one* of the following (you may want to use graphic organizers for this):
  - Make a visual or *graphic organizer* that includes the important concepts for that chapter. (visual/spatial and logical mathematical) [See Appendix for several examples of graphic organizers.]
  - Make a chart that shows the most important concepts. (visual/spatial; logical mathematical)
  - Make several lists of organized—categorized—ideas related to the chapter. (logical mathematical)
- c. *Reading Response Journal*: After reading each portion of the assignment, respond with a question or two or several comments in a response journal. Read

on and repeat the journal response (verbal/linguistic; intrapersonal).

- d. *Studying as a Group*: Talk with one or two peers about the important aspects of the text for you (interpersonal; verbal/linguistic). One person should serve as recorder who will list who participated in the study group and write-up of the key concepts that were discussed.
- e. *Create a song or a rap*: Create a song or a rap about the reading assignment which you then audiotape and turn in to the instructor. (musical)

Evaluation of these reading responses is quite simple. Entries that demonstrate a basic or minimal effort to comprehend and retain the material result in three points; solid summaries or indications of connections result in four points, really extraordinary responses (with unusual depth, creativity, and/or thoroughness) earn five points. Failure to submit a response results in zero points. Even the prospect of three points is enough incentive to entice students to do the reading responses, for they add up to a total that is equivalent to one exam.

In our experience, deciding whether a response is a three, four, or five can be done in well under one minute and often an instructor can evaluate three per minute. It is quickly obvious whether students have put much thought into these assignments. So a class of 25 can be evaluated in about 12 minutes—no more than it takes to grade a quiz (and less time if you include time to write that quiz). A much larger class might be evaluated by a student assistant once the criteria and some models of each level of work are established. However, we find it useful to see what the students are getting out of the reading, so we do the evaluations ourselves, and we sometimes get intrigued and read materials more closely. Also, during the first two weeks, we find that students need feedback, so some comments on how to improve or what was especially well done are written. The time commitment for the first couple of weeks might mean a couple of minutes per Reading Response. After the second week, a simple score and a few

words on each assignment are sufficient.

A quick look at the Concept Mapping or the Conversational Roundtable graphic organizers in the appendix will illustrate how conversion of prose into an organizational scheme requires engagement and thought. We should add that in these courses, examinations also stressed big ideas, analysis, synthesis, evaluation, connections of ideas, and “working with” the ideas, not memorization of definitions or bits of information. “Tests” were take-home essays or were in-class essays in which students wrote on integration/application questions that had been provided in advance. Thus, the evaluative processes were consistent with the Reading Responses and class discussions: a quality essay was based on ability to compose and support an argument. The big picture (deep learning) issues were the focus of each of the courses.

#### EVIDENCE OF SUCCESS

We find that with this technique, students not only do the reading, they are more likely to participate in class since they have actively *processed* the reading material. They *do* something with the readings. In addition, both professors in this project recorded daily class participation scores, so students knew they were being evaluated on the quality of their contributions to the class discussion. They were forewarned that those who had not done the reading were less likely to make substantive contributions and that we could usually tell if someone was speculating rather than grounding her/his comments on the reading.

We have some indicators that reading responses enticed students to read, but more importantly, they helped some students to develop reading comprehension strategies. A follow-up survey was distributed and post-course interviews were conducted at the conclusion of three of the courses. The survey instrument provided feedback on the reading response assignments and student engagement in reading. Fifty-eight percent of the students surveyed stated that they

read 100 percent or “almost all” of the reading. Another 20 percent reported reading 75 percent of the assigned readings. So a total of 78 percent of the students stated that they read 75 percent or more of the reading assignments, and the amount of reading in each class was substantial (typically about 50 pages per class meeting). The reasons most often stated for completing the reading assignments were the Reading Response assignment and points given for class participation. When asked, “Do you feel that the various forms of reading responses helped you to engage the material more effectively?” 85 percent of the students indicated that the Reading Responses helped them to *engage* the textual material.

When asked, “Did you learn anything about yourself as a reader by doing the responses?” 68 percent of students in the study responded affirmatively. Qualitative/narrative responses included:

I found that by taking time to respond or reflect, I was able to grasp the information better.

If I write in some form, I retain information better.

I learned that I focus better when there is an assignment directly related to the reading.

I discovered that I learn more if I create and answer specific questions as I read.

I liked the graphic organizers that made me think of the “big ideas.”

If you assign interactive responses, students will read more.

In course evaluations and post-course interviews, some students reported that they have continued to use the reading strategies learned in this class in other courses. At this point the data on post-course use of the strategies (that is, subsequent courses) would have to be called anecdotal, for those were voluntary comments rather than elicited questions posed to every student. Still,

some students have indicated that they have learned techniques for reading more deeply and those reading strategies are carrying over to other courses.

### THEORY REVISITED

For students, the initial response to reading responses may be the desire for a short-term reward: points for doing the assignment or for class participation. For some students, it may never go beyond that point. In that case, reading responses may be little different than quizzes, though we would argue that they take less instructor time to create and evaluate than quizzes and they do allow for a “multiplicity of intelligences”—multiplicity of approaches to constructing meaning. For some students, however, reading comprehension is enhanced as students learn new strategies for connecting to the material. As they learn to connect—to compare and contrast, to see how the argument was constructed by mapping the concepts, or to visually diagram the relationships between ideas—they may begin to see some of the intrinsic joys of intellectual inquiry. This means that learning itself takes on meaning and the reading process may become meaningful in a way that was not previously salient to students. This is a step toward deep learning; it is a step toward learning as more than a temporary means—something to get out of the way—in order to reach another goal. The ultimate idea is for learning itself to become construed as meaningful. In one sense, our objective in this project is to create implicit social constructionists when it comes to the college classroom.

If deep learning requires students to engage the materials, to relate those materials to something they already know, to construct their own meaning, and then to embed their learning in semantic memory (the memory that relates to meaning rather than episodes or mnemonic devices), then that learning must use the methods that readers use to make meaning. The intention and purpose behind this move to connect deep

reading to deep learning is that we must recognize that readers do not all do this in the same way. Gardner (1983, 1993, 2000) and others have suggested that some people make meaning only when they orally and auditorially process ideas. They must hear themselves talk about the connections. Many people who have this kind of learning style will glaze over when they see a graphic organizer that tries to represent the same ideas in a visual spatial diagram. However, creating a visual diagram can be the best way for some people to make sense of the material. If part of the task of deep learning is to help students ferret out meaning and to become implicit social constructionists, it makes sense to respond to the varieties of ways in which people “connect” to new material. By drawing on reading comprehension theory and multiple intelligence theory in designing assignments, we believe sociology instructors can learn something important about how sociological concepts can be assimilated into the thinking—into the deep processing—of those new to the discipline.

### **PROBLEMS AND DILEMMAS**

We do know from course evaluations that some students hedged by reading just enough to do a reading response, and highly capable students are sometimes able to “bluff” effectively. (Interestingly, some narrative comments on course evaluations included “complaints” they read so much more of the material assigned for this class.) The strategy is not fail-safe against students trying to get by with the least possible work. Moreover, we are aware that once a reading has been used in a course, there may be electronic copies of reading responses shared from students who studied that text in a previous term. No strategy can ensure that it will foster intrinsic satisfactions or deep learning, but if means and ends are consistent, the potential is far greater that students will learn strategies for deep reading and intrinsic satisfactions of deep learning.

There may well be other strategies to enhance reading that would be more effective than Reading Responses. We view this as only a first step. We look forward to even more creative ideas for how to truly engage students in their sociological reading, but we encourage innovations in which the enticement method has some resonance with the ultimate objective of perspective-transforming *deep learning*. Methods that lend themselves to intrinsic satisfactions of true engagement and connectedness are more likely to contribute to that end.

### **CONCLUSION**

Initial research has shown that not all students come to college with reading skills that will ensure their success in college. College faculty can be proactive in helping students become more active and engaged in reading assignments—an essential step toward the larger objective of deep learning. Many students find that written responses to reading are useful in making the reading assignments more accessible. Students are motivated to read more carefully when they are provided with a variety of ways to respond to the text—ways that are consistent with their own learning style. The fact that the method of enticing students to read also taught them new strategies for comprehension meant that the means were consistent with the end—deeper reading for deep learning. More than half of the students found that these reading responses helped them to understand their own reading skills and habits. The fact that points are given for these reading responses was a significant component of the assignment, but many students found that they learned new ways to read more deeply and to construct their own meanings from the text. The overall quality of class discussions also improved significantly once these authors began using reading response assignments combined with daily class participation points. While not all students became readers for construction of meaning, at least some found that reading can be more than a hurdle to

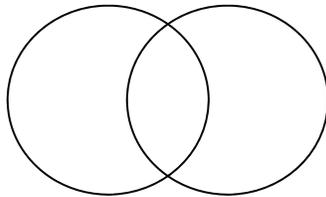
jump or to evade in pursuit of a degree.

Deep learning requires a profound engagement with ideas and a search for meaning in those ideas that involves personal salience for the learner (Tagg 2003). Only when this is the case will learning be stored in long-term semantic memory. Yet as many as half or even three-quarters of our students (probably variable by school and by type of academe) are implicit rational choice thinkers when it comes to learning, and their long-term objective is a degree rather than personal transformation and growth. It seems that at least in regards to their attitudes toward learning, a paradigm shift by students is needed. Such a transformation is a daunting prospect, and we must

think about how this change can be facilitated as we design student work. Assignments that focus only on rewards and punishments as the motivation for doing academic work seem unlikely to facilitate a paradigm shift. If we want deep learning (and reading that entails in-depth engagement), our assignments need to appeal to the multiple ways in which students make meaning. We must set forth work that plants seeds that can result in deep learning, and those seeds must entice, mentor, and lead students into meaning-seeking reading and attentiveness. Our means of instruction must be consistent with our long-term objectives for student learning.

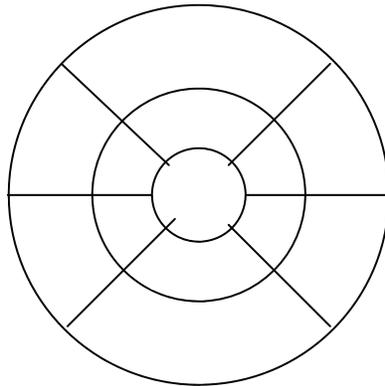
#### APPENDIX. SAMPLES OF GRAPHIC ORGANIZERS

**Venn Diagram:** Compare and Contrast



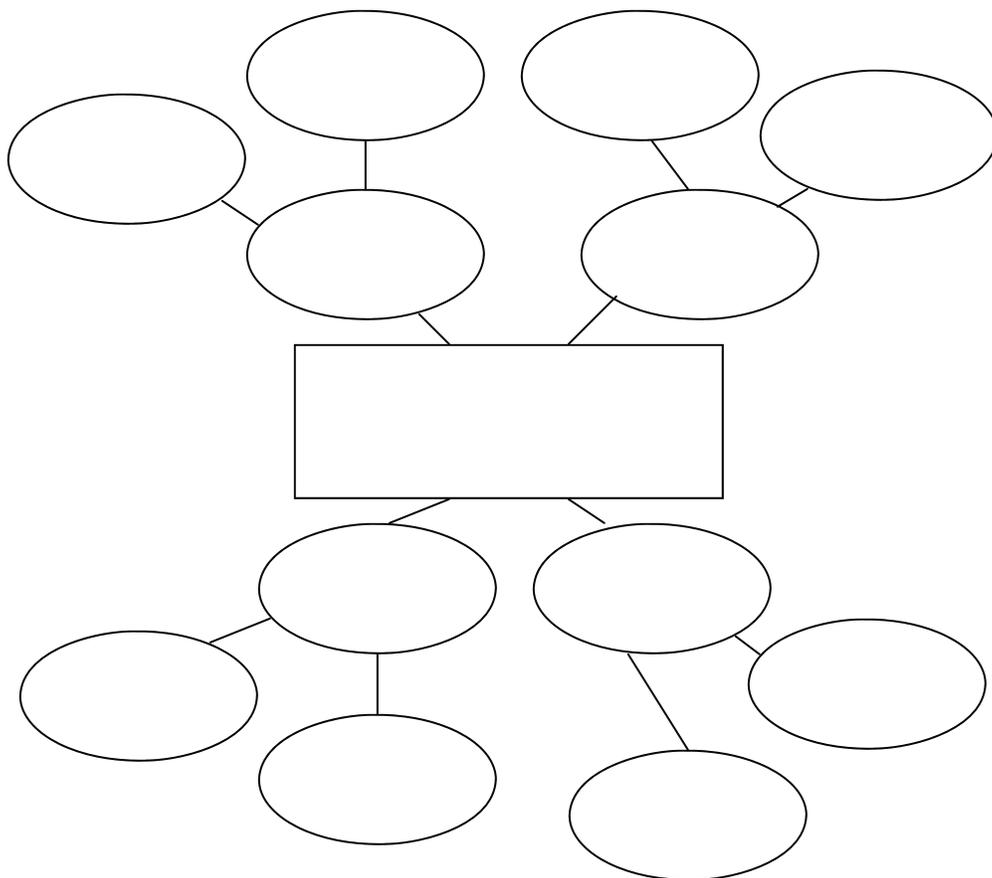
Observations, Inferences, Connections, Questions:

**Conceptual Target\***



APPENDIX (cont'd.)

**Concept Mapping:** Linking ideas together as the author links them. Place the core concept of idea in the center rectangle and put secondary ideas or concepts in adjacent circles to indicate connections of ideas. Draw your own concept map.

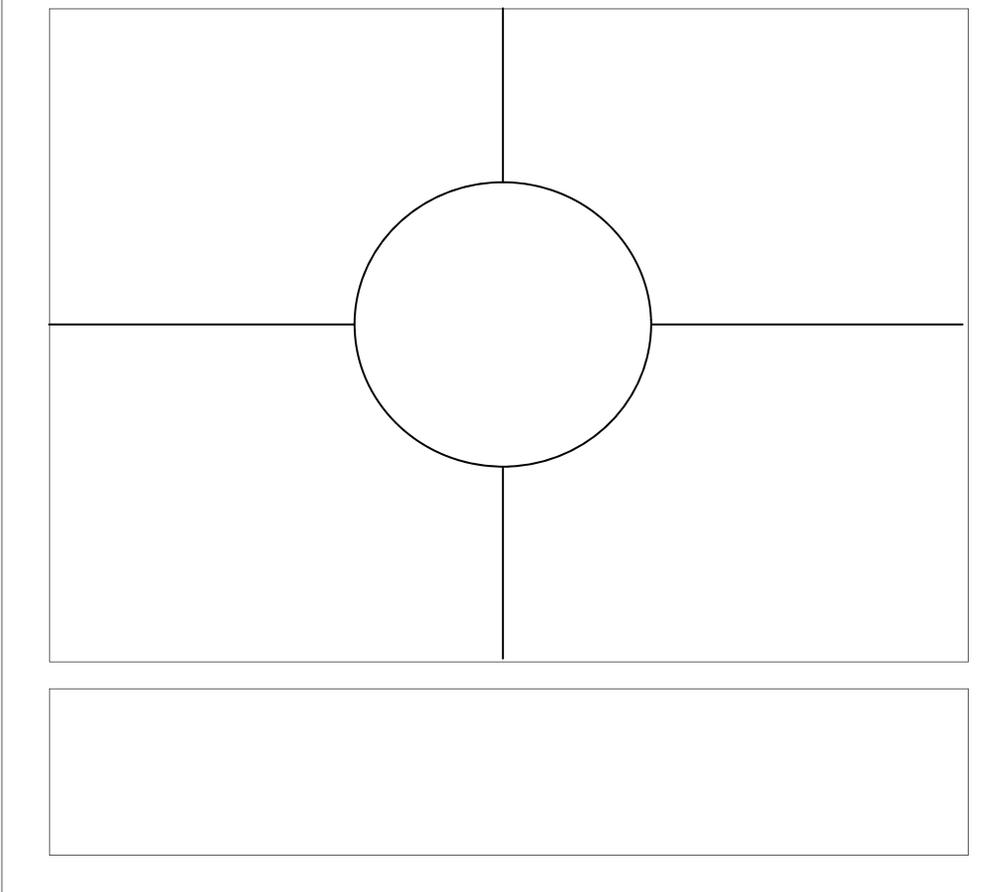


**Three Column Organizer**

Core idea	Description	Application
Conclusions		

## APPENDIX (cont'd.)

## Conversational Roundtable\*



\*from Jim Burke *Reading Reminders*, Hanover, NH: Boynton/Cook Publishers. 2000.

## REFERENCES

- Adams, Guy B. and Danny L. Balfour 2004. *Unmasking Administrative Evil*. Rev. ed. London, England: M.E. Sharp.
- Althausser, Robert and Kim Darnall. 2001. "Enhancing Critical Reading and Writing through Peer Reviews: An Exploration of Assisted Performance" *Teaching Sociology* 29(1):23-35.
- Applegate, Anthony J. and Mary Dekonty Applegate. 2004. "The Peter Effect: Reading Habits and Attitudes of Pre-Service Teachers" *The Reading Teacher* 57(6):554-63.
- Armstrong, Thomas. 1993. *7 Kinds of Smart: Identifying and Developing Your Many Intelligences* New York: Plume.
- Baer, Allison L. 2005. "Do You Hear Voices? A Study of the Symbolic Reading Inventory" *Journal of Adolescent and Adult Literacy* 49(3):214-25.
- Bart, Pauline and Linda Frankel. 1986. *The Student Sociologist's Handbook*. 4th ed. New York: Random House.
- Bloom, Benjamin S. 1956. *Taxonomy of Educational Objectives: Handbook I, Cognitive Domain*. New York: McKay.
- Bomer, Randy. 2006. "Reading with the Mind's Ear: Listening to Text as a Mental Action" *Journal of Adolescent and Adult Literacy* 49(6):524-35.
- Bordt, Rebecca and Pager. 2006. "Using a Research Article to Facilitate a Deep Structure Understanding of Discrimination." *Teaching*

- Sociology* 34(4):403-10.
- Burke, Jim. 2000. *Reading Reminders: Tools, Tips, and Techniques*. Portsmouth, NH: Boynton/Cook.
- Campbell, Linda, Bruce Campbell, and Dee Dickson. 1999. *Teaching and Learning through Multiple Intelligences*. 2nd ed. Allyn and Bacon.
- Ciardello, A. Vincent. 2003. "To Wander and Wonder: Pathways to Literacy and Inquiry through Question-Finding." *Journal of Adolescent and Adult Literacy* 47(3): 228-39.
- Coutant, Carolyn and Perchemlides. 2005. "Strategies for Teen Readers." *Educational Leadership* 63(2):42-7.
- Delucchi, Michael and Kathleen Korgen. 2002. "'We're the Consumer—We Pay the Tuition': Student Consumerism Among Undergraduate Sociology Majors." *Teaching Sociology* 30(1): 100-107.
- Fordham, Nancy W. 2006. "Crafting Questions That Address Comprehension Strategies in Content Reading." *Journal of Adolescent and Adult Literacy* 49(5):390-6.
- Gardner, Howard. 1983. *Frames of Mind: The Theory of Multiple Intelligences*. New York: Basic Books.
- \_\_\_\_\_. 1993. *Multiple Intelligences: The Theory in Practice*. New York: Basic Books.
- \_\_\_\_\_. 2000. *Intelligence Reframed: Multiple Intelligences for the 21st Century*. New York: Basic Books.
- Goldsmid, Charles A. and Everett K. Wilson. 1980. *Passing On Sociology*. Belmont, CA: Wadsworth.
- Guthrie, John T. and Donna E. Alvermann, eds. 1999. *Engaged Reading: Processes, Practices, and Policy Implications*. Teachers College Press.
- Hock, Mike and Daryl Mellard. 2005. "Reading Comprehension Strategies for Adult Literacy Outcomes." *Journal of Adolescent and Adult Literacy* 49(3):192-9.
- Horowitz, Helen Lefkowitz. 1987. *Campus Life: Undergraduate Cultures from the Eighteenth Century to the Present*. Chicago, IL: University of Chicago Press.
- Howard, Jay R. 2004. "Just-In-Time Teaching in Sociology or How I Convinced My Students to Actually Read the Assignment." *Teaching Sociology* 32(4):385-90.
- Hurst, Beth. 2005. "My Journey with Learning Logs." *Journal of Adolescent and Adult Literacy* 49(1): 42-6.
- Jensen, Eric. 1998. *Teaching with the Brain in Mind*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Johnson, William A., Jr., Richard P. Rettig, Gregory M. Scott, and Stephen M. Garrison. 2006. *The Sociology Student Writer's Manual* 4th edition. Upper Saddle River, NJ: Prentice Hall.
- King, Martin Luther, Jr. 1957. *Stride Toward Freedom*. New York: Harper and Row.
- Kolb, David A. 1984 *Experiential Learning: Experience as the Source of Learning and Development*. Pearson.
- Kuh, George D. 2001. *National Survey of Student Engagement*. Indiana University Center for Postsecondary Research, School of Education.
- \_\_\_\_\_. 2004. *National Survey of Student Engagement*. Indiana University Center for Postsecondary Research, School of Education.
- Leveen, Steve. 2005. *A Little Guide to Your Well-Read Life*. Delray Beach, FL: Levenger Press.
- Lewis, Michael. 2004. "Developing a Sociological Perspective on Mental Illness through Reading Narratives and Active Learning: A 'Book Club' Strategy." *Teaching Sociology* 32(4):391-400.
- McCarthy, Bernice. 1987 *Four-Mat System: Teaching to Learning Styles With Right-Left Mode Techniques*. Excel
- McCarthy, Bernice and Dennis McCarthy. 2005 *Teaching Around the 4MAT Cycle: Designing Instruction for Diverse Learners with Diverse Learning Styles*. Thousand Oaks, CA: Corwin Press.
- McCarthy, Martha, and George D. Kuh. 2006. "Are Students Ready for College? What Student Engagement Data Say" *Phi Delta Kappan* 49(8):664-9.
- National Education Association. 2005a. *Thriving in Academe* 22(3):6-8.
- \_\_\_\_\_. 2005b *Thriving in Academe* 23(1):5-8.
- NEA Higher Education Advocate. 2005. *Student Engagement Studies*. (22:3): 3-8.
- Palmer, Parker J. 1998. *The Courage to Teach: Exploring the Inner Landscape of a Teacher's Life*. San Francisco, CA: Jossey-Bass.
- Pardo, Laura S. 2004. "What Every Teacher Needs to Know about Comprehension." *The Reading Teacher* 58(3):272-9.
- Perkins, David. 1999. *Outsmarting I.Q.* New York: Free Press.
- Purvin, Diane M. and Edward L. Kain. 2005. "The Research Article as an Instrument for Active Learning for Teaching about Violence, Sexual Abuse, and Union Formation among Low Income Families." *Teaching Sociology*

- 33(3):323-35.
- Roberts, Judith C. 2006. "Engaging College Students in Reading Assignments: Effective Strategies for Readers of All Ages." *Indiana Reading Journal* 38(1):18-24.
- Roberts, Keith and Karen A. Donahue. 2000. "Professing Professionalism: Bureaucratization and Deprofessionalization in the Academy." *Sociological Focus* 33(4):365-83.
- Santa, Carol M. 2006. "A Vision for Adolescent Literacy: Ours or Theirs?" 2006 *Journal of Adolescent and Adult Literacy* 49(6):466-76.
- Schoenbach, Ruth, Cynthia Greenleaf, Christine Cziko, and Lori Hurwitz. 1999. *Reading for Understanding: A Guide to Improving Reading in Middle and High School Classrooms*. San Francisco, CA: Jossey-Bass.
- Seeley, John R. 1969. "The University as Slaughterhouse." Pp. 63-87 in *The Great Ideas Today, 1969*, edited by William Benton. Chicago, IL: Encyclopedia Britannica.
- Sociology Writing Group. 2001. *A Guide to Writing Sociology Papers*. 5th ed. New York: Worth Publishers.
- Sousa, David A. 2006. *How the Brain Works*. 3rd ed. Thousand Oaks, CA: Corwin.
- Spargo, Edward. 1977. *The College Student: Reading and Study Skills*. Providence, RI: Jamestown Publishers.
- Stokes, Kay, Keith A. Roberts, and Marjory Kinney. 2002. *Writing in the Undergraduate Sociology Curriculum: A Guide for Teachers*. 2nd ed. Washington, DC: ASA Teaching Resources Center.
- Tagg, John. 2003. *The Learning Paradigm College*. Bolton, MA: Anker Publishing Co.
- Tovani, Chris. 2005. "The Power of Purposeful Reading." *Educational Leadership* 63(2):48-51.
- Williams, Bronwyn T. 2004. "A Puzzle to the Rest of Us: Who Is a 'Reader' Anyway?" *Journal of Adolescent and Adult Literacy* 47(8):686-9.
- Yamane, David. 2006. "Course Preparation Assignments: A Strategy for Creating Discussion-Based Courses." *Teaching Sociology* 34(3):236-48.

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