

Just-in-Time Teaching in Sociology or How I Convinced My Students to Actually Read the Assignment

Author(s): Jay R. Howard

Source: *Teaching Sociology*, Vol. 32, No. 4 (Oct., 2004), pp. 385-390

Published by: [American Sociological Association](#)

Stable URL: <http://www.jstor.org/stable/3649666>

Accessed: 25-08-2014 20:32 UTC

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



American Sociological Association is collaborating with JSTOR to digitize, preserve and extend access to *Teaching Sociology*.

<http://www.jstor.org>

NOTES

JUST-IN-TIME TEACHING IN SOCIOLOGY OR HOW I CONVINCED MY STUDENTS TO ACTUALLY READ THE ASSIGNMENT*

JAY R. HOWARD

Teaching Sociology

IN THE PROCESS OF COLLECTING assessment data in my introductory sociology course, I made a startling and disappointing discovery. For the most part, students simply were not bothering to read the basics version of the introductory survey textbook that I assigned. This discovery presented me with two related challenges. First, I had to carefully choose readings that would enhance student learning, active engagement with the material, and critical thinking. Second, I had to find an instructional method that would motivate students to actually read the material. In this teaching note, I describe how I came to select readers, rather than comprehensive survey textbooks, and how I utilized instructional technology through Just-in-Time (JiT) quizzes to encourage students to read them.

Perhaps my students had good reason not to read the introductory textbook. Such textbooks have often been discussed and debated in the pages of *Teaching Sociology*. Rau and Baker (1989) criticized introductory texts for lacking intellectual depth and rigor. Hinch (1988) criticized their encyclopedic approach, charging that it failed to inspire critical thinking in students and erroneously separated theory, method, and fact. Others have charged that introductory texts fail to provide sufficient or appropriate coverage of certain topic areas such as race and ethnicity (Dennick-Brecht 1993), class stratification (Lucal 1994), disability (Taub

and Fanflik 2000), and sexuality (Phillips 1991). Textbook author Diana Kendall (1999) concluded that while the standard review process can sharpen the focus of texts and clarify issues for students, it also tends to encourage the status quo or mimicry of best-selling books, thus discouraging innovation. Given all these criticisms, why do instructors assign textbooks at all?

The obvious answer is that reading assignments expose students to ideas and information that we want students to understand. Researchers have argued that in addition to simply acquainting students with content "reading is the platform from which critical thinking, problem solving, and effective expression are launched" (Pugh, Pawan, and Antommarchi 2000:25). Rumelhart's (1985) interactional model of reading posits that the interaction of the reader and the textbook leads to the creation of meaning. Rosenblatt's (1978) transactional theory of reading suggests that readers construct knowledge as they bring their own input to the text. Pugh et al. (2000) suggest that views of textbooks are linked to cognitive development stages, arguing that college students should move from seeing texts as tools of authority to road maps to changing repositories of knowledge to a source of values and evidence to be critically examined. However, most conventional, large, comprehensive textbooks "represent the kind of reading least likely to be associated with" higher levels of cognitive development (Pugh et al. 2000:30).

PROBLEM: GETTING STUDENTS TO READ

As reported elsewhere (Howard, forthcoming)

*Please address all correspondence to the author at the Department of Sociology, Indiana University Purdue University Columbus, 4601 Central Avenue, Columbus, IN 47203; e-mail: jhoward@iupui.edu.

Editor's note: The reviewers were, in alphabetical order, Deborah Abowitz, Thomas Gerschick, and Kelley Hall.

ing), in the fall of 1999 I began surveying students in my introductory sociology courses on the last day of the semester regarding their use of time, study habits, and use of learning technologies in the course. I continued this practice at the conclusion of my single session of introduction to sociology for each of the next eight semesters. I learned that the vast majority of students (93%, N=232) “usually” or “always” read the assigned pages in Henslin’s (2001) *Down to Earth Sociology* reader (see Table 1). The primary text for the assigned reading in the course was a brief version of a best selling standard introductory sociology text that I found to be well written and had all the features common to introductory survey texts that are supposed to engage students: color photos, key terms in bold print, chapter summaries, and so on. However, after just two semesters of surveying introductory sociology students, I discovered that only a minority of students (40%, N=60) either “usually” or “always” read the assigned pages in this survey text. The students who received course grades of C, D, or F were much less likely to report reading the survey textbook than those who received an A or B (30.6% to 54.2%). (Although this difference is quite large, it was not statistically significant probably because of the small sample size [N=60].)

My first response to this discovery was to change books. I replaced the standard survey text with a second reader. I selected Ruane and Cerulo’s (2000) *Second Thoughts*.¹ This change in books resulted in a large increase in the percentage of students reporting they “usually” or “always” read the assigned pages compared to the survey introductory text formerly used. Over the next four semesters when I used *Second Thoughts*, nearly 70 percent of students reported reading it (see Table 1). However, as Table 1 reveals, students who earned course grades of A or B were significantly more likely than students who

earned a course grade of C, D, or F to report they “usually” or “always” read the text (78.2 to 56.2%). Faced with still only about one half of C, D, and F students reading the *Second Thoughts* assignments, I looked for a new approach to encourage students to read.

A SOLUTION: JUST-IN-TIME QUIZZES

Colleagues at Indiana University Purdue University Indianapolis had developed a method of blending active learning with Web technology that they labeled Just-in-Time Teaching (Novak, Patterson, Gavrin, and Christian 1999). The strategy of Just-in-Time (JiT) teaching involves giving students Web-based assignments that must be completed no later than two hours prior to the start of the class. The instructor then uses the two hours prior to the start of class to assess and grade the students’ work and to incorporate students’ responses into the class presentation for the day.

I use Indiana University’s Oncourse® system to host JiT quizzes. Oncourse, similar to WebCT® and Blackboard®, allows faculty to create, integrate, use, and maintain Web-based teaching and learning resources. While it can be used for courses that are totally Web-based, it has more often been used as a supplement to traditional classroom instruction. Using Oncourse’s online surveys and quizzes feature, I created a brief two-question quiz for each selection assigned in the *Second Thoughts* reader. The first question was a computer graded (one point) multiple-choice question, which could be easily answered if the student completed the assigned reading.

Accepting Berger’s (1963) claim that the first wisdom of sociology is that things are not always what they seem, I tried to write multiple choice questions that would force students to consider some of the evidence in each selection that challenges conventional wisdom. For example, for the *Second Thoughts* selection titled “Children Are Our Most Precious Commodity,” I asked the following multiple-choice question:

¹Ruane and Cerulo’s *Second Thoughts* is now in a third edition (Pine Forge 2004).

Table 1. Students' Use of Assigned Texts by Course Grade: Percent answering "Always" or "Usually" (Kendall's tau-b)

	<i>Course Grade of C, D, or F</i>	<i>Course Grade of A or B</i>	<i>All</i>	<i>N</i>
<i>Down to Earth Sociology Reader</i>	89.8	96.7**	93.5	232
Survey Text	30.6	54.2	40.0	60
<i>Second Thoughts Reader (without JiT Quizzes)</i>	56.2	78.2*	68.7	112
<i>Second Thoughts Reader (with JiT Quizzes)</i>	95.9	100	98.3	60
N	108	124	232	
* p < 0.01 ** p < 0.0001				

In terms of the percentage of one-year-olds fully immunized, the United States trails each of the following countries except:

- A. India
- B. Mexico
- C. Albania
- D. The Congo

While it is not common knowledge that the correct response is "D", the answer is readily available to anyone who reads the chapter. Thus I tried to select a counter-intuitive piece of information from each selection for the multiple-choice question. I also tried to get students to think about how often our conventional wisdom offers contradictory advice. For example, to accompany the selection "Love Knows No Reason," I used the following question:

When it comes to "falling in love," which is most often true:

- A. "Birds of a feather flock together" or "Opposites attract"?
- B. Birds of a feather flock together
- C. Opposites attract
- D. This is a trick question. Both are equally true.

While it is unlikely the typical student will know the answer a priori, a quick read of the selection will easily tell students that "A" is the correct answer.

The second question for each quiz was a short-answer question that required students to summarize or synthesize information from the reading. For example, to accompany the selection "Children Are Our Most Precious Commodity," I asked students:

What evidence suggests that perhaps we don't value our children as much as we say we do?

I read and graded (1 to 3 points) each response to the second question in the two hours prior to class. I was struck by the degree of emotion that often accompanied students' discovery that things are often not what they seem:

One quarter of the homeless population is children. One third of college freshman [sic] are enrolled in remedial classes. Seven million children are assaulted each year. What evidence suggests that perhaps we DO value children?

First the United States falls behind on the fight against infant mortality and inoculation. Second, homicide is the second leading cause of death in 15-24 year olds, third in 5-14 year olds, and fourth for the 1-4 age group. The children that do have homes are still faced with sexual and physical abuse. Where are children safe in the world these days? School? Not exactly, many children and teenagers are

subject to street gangs, violence, and school crime.

The figures show there are discrepancies in how we are taking care of our children's physical needs. More than 20% of the children live in poverty, two thirds are on welfare, and one fourth is homeless. One in six children is physically abused and one in seven is sexually abused. The list seems to go on and on. WAKE UP AMERICA!

Certainly, these responses indicate a much higher degree of emotional reaction to the reader than I ever received in response to a survey textbook.

Incorporating selected responses like these into the class session via PowerPoint® provided a jumping off point for further discussion of the topic in class. It also allowed students with weaker responses to see examples of stronger responses and allowed me to publicly affirm students who wrote particularly good responses to the question. (I asked students to offer an alias in their responses if they did not want to be credited for their answers in class.) It would also be possible to present less well-developed responses to the class, pointing out their strengths and then asking students to critique each response in order to improve it.

The evidence indicates that in addition to eliciting strong emotional responses, the online Just-in-Time quizzes did spur a greater percentage of students to read the assigned selections. In my first two semesters of using JiT quizzes, 98 percent of students (N=60) reported that they "usually" or "always" read the assigned selections in *Second Thoughts*, a 30 point increase!

POTENTIAL PROBLEMS AND USES OF JUST-IN-TIME TEACHING

Although I have been pleased with the success of Just-in-Time quizzes in my introductory sociology courses, this strategy does present challenges. The first challenge is the amount of time necessary to successfully utilize JiT quizzes. Writing the quiz questions for each assigned reading is best done

prior to the start of the semester so that you are not caught in a time crunch with both quiz creation and the technical implementation. Solving glitches in unreliable technology can take large amounts of time, and if you are unfamiliar with Web resources you may also need to spend time working with technical support staff who can help you create the online quizzes. It is possible to distribute hardcopy of the quizzes and have students simply email their quizzes to the instructor by the deadline but this presents a significant data management problem for the instructor. In a mass section of the course, the number of emailed responses could be unmanageable.

Another time burden for faculty is the time required immediately prior to class to grade the quizzes and integrate selected responses into the class presentation for the day. I found that the first time I used the quizzes I spent about 45 minutes per quiz grading and integrating for a class of 30-40 students. By the second semester of using JiT quizzes, I was able to cut the grading time back to about 30 minutes per quiz. While the JiT approach required me to be in my office immediately prior to class, the grading and integrating also helped prepare me for class by causing me to think about the topic to be covered each day and students' potential misunderstandings and confusion.

The second challenge to the success of Just-in-Time teaching is student access to the Web and, therefore, the JiT quizzes. At the commuter campus where I teach all students have internet access via computer labs when they are on campus. The vast majority also has access to a home or work computer that can be used for school work. However, some students—typically the lowest income students—do not have internet access from home. They have to complete their JiT quizzes while they are on campus, which may mean they are required to read ahead in order to be able to complete the quiz on time—an additional burden not faced by students with internet access from home. I have had a small number of students remark

about this disadvantage.

A third potential drawback of JiT quizzes is that while the evidence is good that students are more likely to read the assignments, they may only read to complete the quiz rather than to learn and develop an in-depth understanding. Because they can see the quiz before reading, students may choose to simply skim the selection to find the detail that answers the multiple choice question and to provide a minimal response to the short-answer question. Reducing the likelihood that students will read only for the quiz requires careful construction of the short-answer questions to require integration of material presented throughout the selection rather than offering questions that allow students to simply paraphrase a single paragraph in the text.

Could Just-in-Time quizzes be used with a survey textbook in an introductory course? Of course. However, given the large number of factual details presented in each chapter of these texts, I believe students would be even more likely to simply read for the quiz by skimming the pages until they find the appropriate detail. It is also more difficult to write a single short-answer question that requires integration of the material presented in a chapter from a textbook than from a reader. Instructors would likely need to focus on a single topic within the chapter, which could also encourage reading for the quiz.

While I used Just-in-Time quizzes to solve my problem with introductory students who neglected to read the assigned texts, this approach can be used in virtually any course to address an array of problems. Perhaps, the goal is to get students to think about their opinion or knowledge of an issue prior to class. A JiT quiz can be a means of requiring students to reflect on the topic prior to class thus increasing the potential for a profitable discussion. JiT can be used as a means of checking students' comprehension of topics covered in previous class sessions as well. While the initial

time investment for faculty is relatively large, in my experience the payoff has been worth the investment.

REFERENCES

- Berger, Peter L. 1963. *Invitation to Sociology: A Humanistic Perspective*. Garden City, NY: Anchor.
- Dennick-Brecht, M. Kathryn. 1993. "Developing a More Inclusive Sociology Curriculum: Racial and Ethnic Group Coverage in Thirty Introductory Textbooks." *Teaching Sociology* 21:166-71.
- Henslin, James M. 2001. *Down to Earth Sociology: Introductory Readings*. 11th ed. New York: Free Press.
- Hinch, Ron. 1988. "Teaching Introductory Sociology: Alternatives to the Encyclopedic Text." *Society* 12:2-7.
- Howard, Jay R. Forthcoming. "An Examination of Student Learning in Introductory Sociology at a Commuter Campus." *Teaching Sociology*.
- Kendall, Diana. 1999. "Doing a Good Deed or Confounding the Problem? Peer Review and Sociology Textbooks." *Teaching Sociology* 27:17-30.
- Lucal, Betsy. 1994. "Class Stratification in Introductory Textbooks: Relational or Distributional Models?" *Teaching Sociology* 22:139-50.
- Novak, Gregor M., Evelyn T. Patterson, Andrew D. Gavrin, and Wolfgang Christian. 1999. *Just-in-Time Teaching: Blending Active Learning with Web Technology*. Upper Saddle River, NJ: Prentice-Hall.
- Phillips, Sarah Rengel. 1991. "The Hegemony of Heterosexuality: A Study of Introductory Texts." *Teaching Sociology* 19:454-63.
- Pugh, Sharon L., Faridah Pawan, and Carmen Antommarchi. 2000. "Academic Literacy and the New College Learner." Pp. 25-42 in *Handbook of College Reading and Study Strategy Research*, edited by Rona F. Flippo and David C. Caverly. Mahwah, NJ: Erlbaum.
- Taub, Diane and Patricia L. Fanflik. 2000. "The Inclusion of Disability in Introductory Sociology Textbooks." *Teaching Sociology* 28:12-23.
- Rau, William and Paul J. Baker. 1989. "The Organized Contradictions of Academe: Barriers Facing the Next Academic Revolution." *Teaching Sociology* 17:161-75.

Rosenblatt, L.M. 1978. *The Reader, the Text, the Poem: The Transactional Theory of Literary Work*. Carbondale, IL: Southern Illinois University Press.

Ruane, Janet M. and Karen A. Cerulo. 2000. *Second Thoughts: Seeing Conventional Wisdom Through the Sociological Eye*. 2d ed. Thousand Oaks, CA: Pine Forge.

Rumelhart, D.E.. 1985. "Toward an interactive

model of reading." Pp. 750-72 in *Theoretical Models and Processes of Reading*, 4th ed., edited by H. Singer and R.B. Ruddell. Newark, DE: International Reading Association.

Jay Howard is an associate professor of sociology and Head of the Division of Liberal Arts at Indiana University Purdue University Columbus. He is also a Fellow of the Mack Center at Indiana University for Inquiry on Teaching and Learning.