

CONFRONTING PLAGIARISM

How Conventional Teaching Invites Cyber-cheating

BY ARTHUR STERNGOLD

The digital revolution makes it easy for students to plagiarize. Using Internet search engines, DVD-based reference works, online journals, Web-based news sources, article databases, and other electronic sources, students can find information about nearly any topic and paste the data directly into their papers. Or students can take credit for documents they find or buy online, or that they get as e-mail attachments from friends living down the hall or a thousand miles away.

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Not surprisingly then, digital plagiarism is on the rise. A 2001 survey by Donald L. McCabe, a Rutgers University professor who has been tracking student cheating for years, found that 41 percent of students said they engaged in "cut-and-paste" plagiarism from online sources. This compares to just 10 percent of the students McCabe surveyed three years earlier.

In the 2003 National Survey of Student Engagement, 87 percent of college students who took the survey online said their peers copied data from the Internet without citing sources at least some of the time.

Of course, not all students cheat; after all, only two-fifths of the students in McCabe's most recent survey said they plagiarized from online sources. Most students write their own papers and properly cite sources because they know plagiarism is wrong, they're afraid of getting caught, or they don't feel the need to cheat because they are confident about their

research and writing skills. Furthermore, many colleges and universities are taking strong steps to prevent, detect, and punish academic dishonesty.

Despite this, online plagiarism is likely to become even more prevalent as the supply and accessibility of digital data continue to grow. Amazon.com recently introduced a "Search Inside the Book" feature that allows customers to find passages in books based on any words or phrases contained in the texts.

Soon, using such programs to search through books will be as commonplace as using Internet search engines and full-text article databases, leading to what Steven Levy called in *Newsweek* (see Resources) "a new kind of history, where the world's information is not only more plentiful and diverse, but astonishingly accessible." In this environment, more and more students are likely to succumb to the temptations of cyber-cheating.

PREVENTING PLAGIARISM IN RESEARCH PAPERS

The following strategies, originally designed to strengthen students' research and writing skills, deter plagiarism by making it difficult for students to get away with cheating and by eliminating many of the incentives to cheat. These methods also allow instructors to treat most instances of plagiarism as fixable errors rather than fatal violations of academic policies.

The examples I use to illustrate the methods are from an industry-research assignment in my marketing strategies course. For this project, each student writes a series of research papers about competitive issues in a specific industry or product category, such as snack foods, sporting goods, or pharmaceuticals.

The strategies include:

• Break up major research papers into smaller assignments

Rationale: Dividing a large paper into a series of smaller steps allows an instructor to monitor students' progress on each assignment, provide timely feedback and advice, and identify problems before they become last-minute crises that impel students to cheat. For the first assignment, require students to locate a handful of articles about their topics and then write article reviews or research proposals based on these sources.

For the second assignment, have the students find additional reference materials and develop preliminary drafts or outlines based on these sources. For each subsequent assignment, require the students to build upon their previous

works, taking into account your feedback and instructions.

Dividing a research assignment into a series of more manageable components forces students to work on the project over time instead of trying to write the entire paper at the last minute when they may be most tempted to plagiarize. This method also transforms one anxiety-producing "make-or-break" assignment into several parts, each of which counts for a smaller portion of the student's final grade than a single paper.

When you break up a large research assignment into interim steps, you can treat most instances of plagiarism as fixable mistakes. If you discover that students plagiarized on any of the preliminary assignments, you can require them to correct and re-submit their work, insisting they produce honest work on all subsequent assignments.

Example: A student studying marketing practices in the lodging industry became confused when all the articles she found treated hotels and motels as real estate properties, focusing solely on financial topics and ignoring marketing issues. Frustrated that none of the articles addressed the assigned research topics, this student fabricated data that was not in the source materials.

I sensed a problem when I read the student's first report, and when she admitted what happened, we sat together at a computer and found several good articles about industry marketing practices. Once she better understood where to look, the student performed well on

all subsequent parts of the assignment.

For further thought: When you divide a research assignment into more than one paper, start the project early in the semester and conclude it before the end-of-semester crunch when students are most inclined to cheat. This gives you time to modify later parts of the project based on how the students performed on the earlier steps.

• Require students to write about course-specific topics

Rationale: Instead of allowing students to write research papers about general or common topics, require them to address specific issues closely tied to course objectives and content. For example, instead of having students write research papers about general industry issues, I ask them to address a list of specific research questions corresponding to concepts covered in class.

It is unlikely students will be able to find source materials that exactly address these course-specific topics, forcing the students to analyze and integrate data from multiple sources to complete the assignment. This makes plagiarizing more difficult and less useful. Furthermore, requiring students to write about course-specific issues helps students understand how their research relates to course objectives and topics, so that the assignment reinforces what the students are learning in class.

Example: I often require students to write research papers relating course topics to campus speakers or current news

Some attribute this growing plagiarism to students' laziness, lax morals, or ignorance of the rules, and they demand tougher academic policies, detection efforts, and punishments to stop it. But before placing all the blame on students, we should consider how conventional teaching methods invite cheating, and how strategies designed to improve student learning can prevent it.

Consider the traditional term paper or research assignment for which students must draw on multiple sources to support a thesis or conclusion. Producing this type of paper can be (and should be) one of the most challenging projects students undertake in college because it requires strong research, writing, and critical thinking skills to carry out successfully.

Developing these capabilities is central to higher education's mission, and these skills are prized by graduate schools and employers in today's knowledge-based professions. Indeed, acquiring strong research and writing skills may be more important to students' future careers than acquiring subject-

matter expertise that may become outdated soon after the students graduate or that may become irrelevant when students switch jobs and careers.

Yet most undergraduates have weak research and writing skills, and if truth be told, so do many college professors, graduate students, and other well-educated adults. Most college students do not know how to formulate workable hypotheses or research questions, evaluate the quality and appropriateness of source materials, or integrate data and ideas from multiple sources.

Many students cannot write in a clear and logical manner, support their ideas with evidence and arguments, or edit their own prose. For these reasons, many graduate programs no longer require students to write masters theses, and most undergraduate programs have abolished thesis requirements for all but departmental honors students, as Elissa Guralnick observed in *Change* in 2001 (see Resources).

events. A few years ago, my college sponsored a symposium about controversial aspects of the Internet, such as growing consumer concerns about online privacy. Each student had to attend a symposium program and then find articles about the issues raised at the event.

For their papers, the students discussed how the articles supported or contradicted the views expressed by the symposium speakers. Requiring students to make these kinds of assessments eliminates plagiarism as a viable option; after all, the students attended the programs, not the authors of articles they might track down on the Internet.

• Choose some required source material for your students

Rationale: For an early assignment, require students to write a research paper based on one or two sources that are familiar to you, such as a major reference work in your field or an important course reading. Students are unlikely to plagiarize from materials they know are familiar to you, and it is relatively easy to detect any cheating that may occur.

Example: For the first part of the industry-research assignment, I require students to use a specific article database that specializes in industry information. I'm familiar with the structure and contents of the reports in the database, so I can usually determine if students fully read the reports and if they properly used and cited the data from these sources.

One of my students complained that the report about her industry did not con-

tain the data she needed to complete the research assignment. As I suspected, the student had read only a few introductory paragraphs of the report and, consequently, she did not realize the data she required was scattered throughout later sections of the report. When the student argued, I used a simple online word search to show her numerous places in the report where the information she needed was located.



• Incorporate assignments into class discussions and tests

Rationale: An assigned research paper is too valuable to treat solely as out-of-class homework, so why not draw upon the project in class to support course objectives and illustrate course topics? For example, I frequently call on students during class discussions to give examples from their industry research that relate to the day's topics ("Jane, what does your research suggest are the positioning strategies of major health and fitness centers?").

Similarly, include questions about the students' research in quizzes and tests ("Explain the difference between direct and indirect competition, using

specific examples from your industry research to illustrate your points."). Students will take the assignment more seriously, and work on it more persistently, if you integrate it with other course elements. At the same time, these methods will quickly expose students who are not keeping up with the work.

Example: When called on during class to share his research findings, a student studying the amusement park industry only shared personal anecdotes and observations, rather than information drawn from secondary sources.

Although his insights were rather perceptive, it was obvious the student had not been working on the assignment. At the end of class, I told the student I would call on him at the next class meeting, and that his grade would suffer unless he was able to provide insights based on actual research.

During class discussions, I used to tolerate students who said they "clam up" or "draw a blank" when called on to discuss their research, but I've learned this usually indicates a lack of effort rather than debilitating anxiety. Remind students that when interviewing for jobs and graduate programs, interviewers are unlikely to show much sympathy to students who can't converse intelligently about a variety of academic and job-related topics.

• Meet with students to discuss their research

Rationale: When you first assign a major research project, require the students to sign up for student-professor

While producing a term paper or research report is a daunting task for students who have weak research and writing skills, the situation is made worse when professors give poorly designed assignments or treat the assignments as homework that students must muddle through on their own, outside of class, and with little guidance or help from instructors.

When this occurs, students sense their professors expect them to devote a great deal of time and effort to the assignments even if the professors are unwilling to do the same. Understandably, some students view these tasks as unfair, unclear, unimportant, or even impossible. These students are more likely to justify and engage in plagiarism, now made irresistibly easy by the Internet.

As Rebecca Howard noted in an article in *The Chronicle Review* a few years ago (see Resources), "We expect authentic writing from students, yet we do not write authentic assign-

ments for them." She adds that when instructors invest little time in designing assignments and helping students, it "encourages plagiarism because it discourages learning."

Planning, managing, and evaluating research assignments are difficult tasks, and having to worry about plagiarism only adds to the burden. It turns out that many of the learning-centered teaching practices reformers have been advocating for years can help deter plagiarism as a by-product of improving student learning and performance.

In the accompanying box, I describe several plagiarism-prevention strategies I use with a research assignment in my marketing strategy course. These strategies discourage plagiarism by making it difficult for students to cheat and also by eliminating many of the incentives to cheat. At the same time, these strategies allow instructors to treat most instances of plagiarism as fixable errors rather than fatal violations of academic policies.

conferences at which they must present and discuss their research findings and activities. (These should be conversational meetings rather than formal presentations.)

This helps motivate students to take the research seriously and quickly exposes students who have not been working on the assignment, or whose understanding of their topics is superficial because they plagiarized from source materials. The meetings can also let students discuss problems they are having with their research, such as difficulties in finding good source materials or in trying to reconcile data from multiple sources.

Example: One student submitted a very disorganized paper about health and fitness centers that failed to address several of the assigned research questions, leading me to suspect she had not devoted much effort to the project. Yet during our meeting, it became clear the student had done a great deal of research and analysis.

She had obtained a comprehensive study about recreational trends in the United States and decided to use it as the organizing framework for her paper. I explained that although the study contained lots of useful data, its focus on consumer trends made the report an inappropriate basis for structuring her paper about the fitness industry. Once this was clarified, the student's subsequent assignments were excellent.

For further thought: If several students are investigating similar topics, it's

a good idea to meet with them as a group and encourage the students to respond to each other's points during the conference. This reveals which students have devoted the most (and least) time and effort to the assignment. In one class, I met with several students studying the athletic apparel industry. One was an academic honors student with a high GPA, but her inability to intelligently contribute to the group discussion exposed her lack of work on this project.

• **Require students to submit printouts of source materials**

Rationale: Require students to give you printouts of all their textual sources arranged in the same order as listed on the "works cited" pages in their papers, and to mark with a highlighter all the passages used in their reports. Then, if you question whether students properly cited their sources, you can quickly find the relevant materials and determine if they were plagiarized. If a student's packet of printouts is missing some source materials or if the documents are not properly marked, return the materials and require the students to complete and resubmit the printouts.

Few students will risk plagiarizing when they are required to submit marked copies of all their source materials, and having these printouts in hand helps prevent unproductive arguments with students about whether or not they cheated.

Although some students may view gathering and highlighting their source materials as busywork, many benefit

from the task because it forces them to organize their source materials and decide what information to use in their papers, reducing the amount of time they will later spend on these tasks.

Example: A student studying the fast-food industry cited an article from a politically conservative magazine as supporting proposals for greater government regulations of the industry to combat growing obesity among consumers.

When I found the article in the student's printouts, I discovered the student completely misunderstood the author's views. The author began her article by summarizing the pro-regulation position only to spend the bulk of the article debunking it. The student's highlighting on the printout revealed he had read only the first part of the article, missing the author's point.

For further thought: Reading over the students' article packets is less tedious and time-consuming than you may fear if you assign research topics that interest you. For example, I enjoy reading about innovative marketing practices in the various industries and product categories my students investigate. Sometimes, I find source materials in the students' printouts that are so good I use them as readings for the entire class.

By using these strategies, professors can eliminate a great deal of the after-the-fact detection work and arguments with students that plagiarism involves, allowing instructors to focus on the more important tasks of teaching. ☺

To be honest, I began using these strategies to strengthen my students' research and writing skills and to help guide them through the various stages of producing a substantive research report. Only afterwards did I find these practices have the added benefit of reducing student cheating.

The plagiarism-prevention strategies described in the box stem from a learning-centered model of teaching that runs counter to the prevailing instruction-based paradigm in higher education. As Robert Barr and John Tagg explained in their seminal 1995 *Change* article (see Resources), the traditional view assumes "a college is an institution that exists to provide instruction," rather than viewing a college as "an institution that exists to produce learning."

The traditional paradigm favors lecture-based courses, orderly classroom environments, and limited interaction between professors and students. Those arrangements are rather incompatible with the plagiarism-prevention strategies discussed in this article, which require more hands-on, active, and collaborative learning methods.

That learning-centered approaches can help deter plagiarism should enhance their appeal. Yet my conversations with colleagues indicate many are reluctant to try these methods, even when convinced they can reduce cheating. Some professors believe students should already know how to write term papers and research reports and don't believe it is their responsibility to develop these skills.

Others feel they can't devote valuable class time to letting students work on the assignments because there is hardly enough time during the semester to cover all the course topics and textbook chapters listed in their syllabi.

Some instructors admit they simply don't have the interest or temperament to work closely with students on research and writing tasks, while others argue they were hired for their subject-matter expertise, and their job is to convey this knowledge rather than develop students' research and writing skills. And of course, many professors solve the problem simply by not using any research or writing assignments at all.

These suggest that professors accustomed to using more conventional, lecture-based teaching methods are reluctant to use these plagiarism-prevention strategies because they require instructors to devote more class time to the assignments—and to become more involved with students as they work on the assignments—than many instructors are willing or able to tolerate. In the absence of strong institutional incentives to adopt learning-centered methods, many instructors rationally choose to continue using familiar, lecture-based teaching methods that are easier, safer, and less time-consuming to practice.

Persuading professors to use the kinds of learning-centered practices that deter plagiarism will require major changes in faculty development, evaluation and promotion systems, so that instructors are trained and rewarded for adopting these methods. Accelerating the shift from an instruction-based to a learning-centered paradigm will also require changes in how we train and prepare doctoral students for academic careers.

In her in-depth investigation of the graduate school experiences of students working as teaching assistants, Ann E. Austin reported in *The Journal of Higher Education* in 2001 (see Resources) that only a small portion of the students she studied received any training or guidance. Austin noted this does not bode well for the future of academic teaching, be-

RESOURCES

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cause research shows that graduate school experiences strongly influence the career goals, attitudes, and expectations of future professors.

Austin's findings are consistent with Larry Spence's observations that most professors learn to teach through a process of trial-and-error (perhaps "sink-or-swim" is more fitting), employing the same lecture-based methods of teaching their professors used, who practiced the same instructional methods their professors used, and so on.

Consequently, while most professions have changed considerably over time, Spence observed, "a 15th-century teacher from the University of Paris would feel right at home in a Berkeley classroom" because most professors continue to believe that "teaching is telling, learning is absorbing, and knowledge is subject matter content" (see Resources).

Perhaps the crisis of online plagiarism will compel educators to more closely examine the traditional instruction-based paradigm's failings and, as a result, the crisis may hasten the adoption of educational practices that more effectively support student learning and achievement.

In Margaret Atwood's futuristic novel *Oryx and Crake*, the central character decides to write his own papers in college as an act of rebellion against a status quo in which most students plagiarize and most professors don't care. The growing incidence and ease of online plagiarism, fueled by the increasing supply and accessibility of digital data, make this scenario less far-fetched than some may realize.

Higher education can prevent this future by adopting teaching strategies that will help students gain the confidence, skills, and desire to produce quality research papers, so they don't feel the need to cheat in order to succeed. This won't stop all students from plagiarizing, but it will enable many to gain the deep satisfaction of producing original intellectual work. ☐