CAN PARAPHRASING PRACTICE HELP STUDENTS DEFINE PLAGIARISM?

ELAINE S. BARRY

The Pennsylvania State University, Fayette

Plagiarism is the new dirty word on campus, and college instructors are increasingly interested in teaching students how to prevent committing plagiarism. In this study, college students wrote definitions of plagiarism before and after 6 weeks of practice paraphrasing and citing original sources. Students' definitions of plagiarism were evaluated for content and inclusion of specific elements of plagiarism. Results indicated a significant increase in post-paraphrasing plagiarism definition scores compared with pre-paraphrasing definition scores. In particular, all students were likely to include the notion "taking someone else's words is plagiarism" in both their pre-paraphrasing and post-paraphrasing definitions. After paraphrasing practice, however, students were more likely to include two additional specific elements of plagiarism in their post-paraphrasing definitions (taking someone else's ideas is plagiarism and not giving credit is plagiarism). The importance of having students practice paraphrasing techniques, rather than merely teaching them definitions of plagiarism, is discussed. The methods used in this study could be easily adapted to virtually any course in which the instructor wishes to help students understand plagiarism.

Plagiarism on college campuses is increasingly receiving attention from instructors and researchers, and "plagiarism" is the new dirty word on campus. A recent search of PSYCINFO using "plagiarism" yielded over 100 results, most in the last two decades. Many of the scholarly articles that have been devoted to the topic of plagiarism fall into one of the following categories: (a) Plagiarism as a professional ethics issue (e.g., May, Campbell, & Doyle, 2000), (b) unintentional plagiarism as a result of memory processes (e.g., Brown & Murphy, 1989), (c) plagiarism by using the Internet (e.g., Harris, 2002), (d) identifying students who are likely to plagiarize (e.g., Lester & Diekhoff, 2002), or (e) describing of frequency and reasons for plagiarism (e.g., Roig & DeTommaso, 1996).

For most college instructors, this last set of concerns is most pressing. By understanding how often and why plagiarism occurs, instructors are in a better position to take steps to prevent it from happening. Typically, their focus is students' lack of knowledge about what plagiarism is and how to avoid committing it. For example, Roig (1997) asked students to read a paragraph from a psychological journal article and then he presented to them various rewritten versions of the same paragraph. Afterward, Roig's participants completed a plagiarism knowledge survey. Although the various rewritten versions of the paragraph varied in the extent to which they
plagiarized the original, Roig found that up to half of the participants did not detect plagiarism in these passages. Roig concluded that students may plagiarize because they do not understand how to paraphrase and cite correctly.

More recently Landau, Druen, and Arcuri (2002) used a similar method to survey students about their knowledge of plagiarism. They also presented to students original paragraphs and rewritten versions of the passages. After determining whether they thought the rewritten passages were plagiarized, students were given no feedback, feedback only, examples only, or feedback with examples. Feedback included answers to the questions on the plagiarism knowledge survey, while examples included a definition of plagiarism with plagiarized examples. Landau et al. (2002) found that giving students feedback, examples, or both significantly affected students’ scores on the plagiarism knowledge survey, indicating an increase in their knowledge of plagiarism. The authors concluded that teaching students how to avoid plagiarism is important to helping them avoid academic dishonesty, but also cautioned that this increased knowledge of avoiding plagiarism may not extend to situations in which grading is a consideration.

In response to the grading concern, Schuetze (2004) recently had success using two brief homework assignments to help students understand plagiarism. Although her students did not practice paraphrasing, the assignments were graded and counted as a part of the overall course grade. For each assignment, students read a page of text from a published manuscript with all citations removed. They then indicated which sentences they thought should have a citation. Students received feedback after the first assignment, and later scored higher on the second assignment. Schuetze also found fewer citation problems in a subsequent term paper for students who completed the homework assignments compared with students in another course section without the assignments. She concluded that merely giving students information about plagiarism wasn’t enough to provide them with the skills to avoid plagiarism.

My own experience with student writing supported the idea that a lack of knowledge about plagiarism and how to avoid it led many students to plagiarize. For instance, it became clear after having students turn in source articles with their papers: Sentences would be taken directly from article sources they turned in, with the stolen sentences neatly highlighted! In order to combat this lack of knowledge, and in order to practice paraphrasing, I designed a series of graded assignments to provide students practice developing the skills necessary to prevent plagiarism. Three goals drove this process: (a) To teach students how to paraphrase and cite correctly (as concluded by Roig, 1997), (b) to provide students graded opportunities to learn about plagiarism (as concluded by Landau et al. 2002), and (c) to let students actually practice the desired skill (as concluded by Schuetze, 2004).

An additional impetus for doing this study came from a desire to empirically evaluate the method I used in order to combat plagiarism. For years teachers have created assignments based on their goals
for student accomplishment. In this age of increasing accountability and evidence-based practice, it is important to determine objectively whether the goals of certain assignments are being met. Thus the question: Can paraphrasing practice help students define plagiarism? First, students defined plagiarism in a pretest. Then they completed six weekly homeworks, consisting of practice paraphrasing and citing quotes. Students then defined plagiarism again in a posttest. Another group of students received no paraphrasing practice but also defined plagiarism. I hypothesized that scores on the posttest would be higher than scores on the pretest and that scores on the posttest would also be higher than the scores of the comparison group.

Method

Participants

A total of 68 students (44 female, 24 male) enrolled in two freshman-level introductory lifespan development course sections participated as part of course requirements. Thirty-five (35) students from one course section took the pretest, and 28 of these students also completed the posttest. An additional 33 students in the other course section served as a control group for the posttest definitions of plagiarism.

Materials

Six quotes from important developmental figures provided participants with practice paraphrasing from original sources. Information about the source of the quote was also included, but not in standard APA format. All test materials (pretest, posttest, and control test) were presented and completed as in-class activities. The six weekly paraphrasing homeworks were handed out in class and turned in one week later in class.

Procedure

Early in the semester, 35 students from one course section (the “Practice” group) defined “plagiarism” in a pretest. Over the next 6 weeks these students completed a series of weekly assignments in which they paraphrased quotes from important developmentalists (Piaget, Vygotsky, Erikson, etc.). Each assignment consisted of one paragraph-long quote, containing approximately 100 to 125 words. Students paraphrased each quote in two different ways (to practice paraphrasing techniques) and provided a citation after each (to reinforce the notion of correct citation style). Students then provided the reference for the source in APA style. The grading criteria for each of the weekly paraphrasing assignments included points for showing an understanding of the quote, maintaining the meaning of the quote, correct citation after the paraphrase, and correct reference format.

Students defined “plagiarism” once again in a posttest at Week 6. In order to control for knowledge about plagiarism that students may have gained through the semester but not from the paraphrasing experience (incidental learning), 33 students from another course section also defined plagiarism at Week 6 (the “Control” group). Students in the control group did not have weekly paraphrasing assignments and had not discussed the topic of plagiarism. The three sets of plagiarism
definitions (pretest, posttest, and control) were scored according to the same criteria and at the same time in a blind grading procedure.

Results
The following criteria provided the basis for scoring student responses on the pretest, posttest, and control test (for a total of six possible points): (a) Recognition of plagiarism as a form of academic dishonesty (including “cheating” or “stealing”), 1 point; (b) understanding that it is important to give credit to the author/source, 1 point; (c) knowing that it happens when you claim someone else’s work as your own, 1 point; with (d) “work” described as someone else’s words, 1 point; (e) someone else’s ideas, 1 point; and/or (f) someone else wrote the paper (internet, friend, etc.), 1 point.

Mean scores of the pretest, posttest, and control plagiarism definitions appear together for convenience in Figure 1, and show that scores on the posttest, mean 3.23 ($SD = 0.99$) were significantly higher than scores on the pretest, mean 2.14 ($SD = 0.81$), one-tailed, paired samples $t(27) = 6.69$, $p = .0001$. A separate analysis showed that scores on the posttest were
significantly higher than scores on the control test, mean 2.33 (SD = 1.08), independent samples $t(62) = 3.45, p = .001$. Thus, both hypotheses were supported. An alpha level of .01 was used for all statistical tests and estimates of effect size (pretest-posttest comparison $d = 1.26$, posttest-control comparison $d = .86$) indicated that the power of this study exceeded .80 (Murphy & Myors, 2004). Finally, to ensure that higher scores on the posttest were not due to incidental learning about plagiarism that may have occurred over the semester, pretest plagiarism definitions were compared to control plagiarism definitions. Scores on the pretest were not significantly different from scores on the control test, independent samples $t(66) = 0.82, p = .42$. Further, no student scored lower on the posttest than the pretest.

Additional analyses were performed on the six criteria for grading the plagiarism definitions, although no hypotheses were put forward regarding these elements. See Figure 2 for the numbers of students including specific elements in their pretest, posttest and control definitions of plagiarism. The three groups appear together for ease in reference, but the post-hoc analyses of variance were performed separately for pretest-posttest comparisons and posttest-control comparisons. These comparisons showed what students may have gained from their paraphrasing experience.
In particular, two elements in students' definition of plagiarism showed significant differences for each set of comparisons. For the pretest-posttest comparison, students were more likely to include the idea "taking another person's ideas is plagiarism" after they practiced paraphrasing. $F(1,64) = 12.19, p = .0009$ compared with their pretest definitions. Students were also more likely to include the idea "not giving proper credit is plagiarism" after they practiced paraphrasing. $F(1,64) = 19.98, p = .0001$ compared with their pretest definitions. Results were almost identical for the control-posttest comparison. Students who had practiced paraphrasing were more likely to include "taking another person's ideas is plagiarism" compared with students in the control group. $F(1,62) = 6.91, p = .01$. Students in the practice group were also more likely to include "not giving proper credit is plagiarism" than students in the control group. $F(1,62) = 12.79, p = .0007$.

**Discussion**

Results from this study suggest that students can learn from a series of assignments designed to increase their understanding and knowledge of plagiarism and that graded practice may be helpful to this learning process. In particular, even though the control test was given six weeks into the semester, it was not significantly different from the pretest, supporting the interpretation that increased scores on the posttest were not simply due to incidental learning about plagiarism that may have occurred during the semester. Therefore, increased scores were likely due to the paraphrasing practice by students in the practice group.

In each of the studies described above (Landau, et al., 2002; Roig, 1997; and Schuetze, 2004), students were tested on their knowledge of plagiarism through recall only. Students in these studies did not themselves rewrite the passages they evaluated. The most important difference between the study described in the current paper and the other studies described is its emphasis on having students practice paraphrasing. Researchers studying both memory (see Neath, 1998 for an overview of different types of memory) and intelligence (see Sternberg, 1990 for an introduction that includes multiple intelligences) recognize the difference between knowledge that is expressed verbally and knowledge that is performed by action. In this study, students verbally expressed their knowledge about plagiarism in their written definitions. Similarly, they performed knowledge about plagiarism by practicing paraphrasing and citing techniques. It is possible that having access to both types of information in memory helped them to increase their scores on the plagiarism definitions.

As Figure 1 shows, average plagiarism test scores increased after paraphrasing practice. Indeed, no student scored lower on the posttest than on the pretest, suggesting that students learned something about plagiarism from these exercises. However, plagiarism test scores did not increase to the fullest possible extent after paraphrasing practice. It is clear that paraphrasing practice helped students who participated in this class project understand some, but not all, aspects of plagiarism. The purpose of this exercise was to help students practice paraphrasing in order to
prevent them from taking someone else’s work as their own. Although this goal was successfully accomplished, this study was limited in that it did not address all elements relevant to plagiarism to the same extent.

For example, Figure 2 shows that after experience with the paraphrasing exercises, more students included the notion “taking someone else’s ideas,” “taking credit for someone else’s work,” or both, in their definitions of plagiarism. On the other hand, virtually all students included something about the importance of taking someone’s words in defining plagiarism in their pretest or control test plagiarism definitions. Thus, post-hoc comparisons did not show an increase in including this element in the posttest. Further research will need to consider the types of experiences beyond paraphrasing practice that would lead to increases in including the other elements of plagiarism in posttest definitions (i.e., plagiarism as a form of academic dishonesty, using some else’s paper is plagiarism, and claiming someone else’s work is plagiarism). Similarly, although it is tempting to conclude that graded practice was an essential element of helping students define plagiarism, this study did not directly compare graded paraphrasing practice with ungraded paraphrasing practice. Therefore, such conclusions cannot be drawn, although it is difficult to think of a design in which students would complete ungraded paraphrasing work over a period of weeks.

Exercises such as the one described may be used to help students understand plagiarism and increase their knowledge of what defines plagiarism. In addition, by understanding the basic processes of citing and referencing, students are better poised to understand where the information in the texts they read comes from. Few teachers explicitly inform students that their text is a compilation of research in the area of interest, and few introductory-level students question the source of the information they read. Identifying and considering the source is an important first step in critical thinking, and these skills may be developed through paraphrasing and citing practice in exercises similar to the ones described. The current study was not designed to address this question, but may help to set the stage for such research. Future directions for exercises such as the one I have described would include greater attention to helping students understand the various elements that constitute plagiarism, directly comparing articulated knowledge about plagiarism from practice (performance) based knowledge about plagiarism, and examining the role of such exercises in the development of critical thinking.

Notes

1. Portions of this article were presented at Wings to the Future: The First Annual Western Pennsylvania Teaching and Learning Conference, Altoona, PA, March 29, 2003.

2. For copies of the quotes used in this exercise, please contact the author. Send correspondence to Elaine S. Barry, Human Development and Family Studies, Penn State Fayette, Rt. 119 N., One University Drive, Uniontown, PA 15401: email esb12@psu.edu.
References


