AC 2007-2114: AN EDUCATIONAL FRAMEWORK FOR NURTURING A CULTURE OF ACADEMIC HONESTY

Dawn Bikowski, Ohio University
Dawn Bikowski is the Director of the Graduate Writing Program at Ohio University. She teaches engineering graduate students about academic honesty within the context of developing a set of writing skills. She is also a doctoral student in Educational Studies. Her research interests include issues related to academic honesty and how technology can best be used in education.

Melissa Broeckelman, Ohio University
Melissa Broeckelman is a doctoral student in Communication Studies at Ohio University and is also the Academic Honesty Advisor for the Russ College of Engineering and Technology. Her primary research interests are in instructional communication and building cultures of academic integrity.
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Abstract

Academic dishonesty has become a topic of concern at many universities. Many studies have documented the prevalence of academic dishonesty by various student populations, cited reasons that students engage in academic dishonesty, identified policies universities can implement to combat the problem, or suggested strategies that faculty can use to minimize the risk of students cheating in their classrooms. Few papers, however, have addressed the problem of academic dishonesty from a holistic perspective. This paper seeks to fill this void by presenting a framework developed in the Russ College of Engineering and Technology at Ohio University where issues related to academic dishonesty have recently arisen. The framework developed and presented here seeks to decrease instances of academic dishonesty by nurturing a culture of integrity, teaching, and learning.

Programs developed for students, faculty, and within the university are described. To engage students in efforts to promote academic integrity, a writing course was required for incoming graduate students, and a Student Academic Honor Council was formed to reach out to peers and lead efforts in developing a college honor code. A series of faculty workshops on academic honesty was developed to promote faculty understanding through dialogue, and a Faculty Academic Honor Council was developed to promote teaching practices that could help reduce academic dishonesty. College-wide academic integrity initiatives were coordinated with university-wide initiatives so that the efforts of each could complement one another.

Severity of Academic Dishonesty

Academic dishonesty is a complex, multidimensional problem that many universities are working to combat in the United States and internationally. It is a problem that merits attention, as students who engage in academic dishonesty are more likely to become professionals who engage in unethical behavior\(^1\),\(^2\). While cheating in college may not appear to inherently pose any great dangers to the general public, engineers who engage in unethical behavior can place the public at risk\(^1\) if products/structures are incorrectly designed because of a lack of knowledge. Habits formed and knowledge obtained (or in the cases of cheating, not obtained) in college are later carried into the profession, impact the quality of work done, and can have severe consequences. Thus, institutions have an obligation to the public to maintain high standards for academic integrity. Moreover, high levels of academic dishonesty can damage a university’s reputation and lead to an overall decline in public support of higher education\(^2\). It is undoubtedly in the institution’s best interest to promote academic honesty.

Research suggests that 70% of undergraduate students on most campuses admit to some form of academic dishonesty\(^3\). Similarly, 75.2% of graduate students admit to some form of academic dishonesty when asked about specific dishonesty behaviors, even though only 28.7% admit to “cheating” when asked broadly\(^4\). This past year, research at Ohio University revealed that it had higher levels of academic dishonesty than most college campuses\(^5\) at the same time that the Russ College of Engineering and Technology was investigating allegations that many of the master’s
theses written by past graduates may have included plagiarism. Harding, Carpenter, Finelli, and Passow cite research that has shown that over the past four decades engineering students consistently self-report high rates of cheating, second place only to business students. They go on to suggest that professionals coming from disciplines that have a high self-reported rate of academic dishonesty, such as engineering, are more likely to engage in other types of socially unacceptable behavior (such as theft from their employer). Because the incidence of academic dishonesty in universities has been rising, it is reasonable to expect that unethical workplace behavior in engineering is rising as well. On the other hand, as Callahan suggests in The Cheating Culture, it is possible that rising academic dishonesty is just one manifestation of a larger cultural trend that increasingly accepts unethical behavior as a way of getting ahead.

**Complex Causes of Academic Dishonesty**

Academic dishonesty occurs for a variety of reasons. Some academic dishonesty stems from intentional acts of deception, perhaps due to pressure to succeed or fear of failure coupled with poor study skills, time pressures, low self control, a lack of a strong moral position against plagiarism, the ease of copying text from the Internet, or because students believe their peers are cheating. Students also tend to have more lenient attitudes toward plagiarism than do faculty. For example, many students find copying sentences without citing sources and listing unread sources in a reference list as acceptable behaviors. Students might also be less honest because they do not feel their institution values academic honesty or is committed to learning or if they do not feel integrated into the university.

While some academic dishonesty occurs intentionally, this is not always the case. It may be the case that students who are accused of cheating are not aware of all of the academic conventions they are expected to follow and might be committing unintentional acts that could be perceived as academic dishonesty. For example, some students may not understand that citations are required when an author’s idea is paraphrased and therefore do not even realize they are being dishonest. As one study found, even though 77% of students claimed to understand plagiarism, 70% of the students who claimed that understanding demonstrated that they did not know how to attribute sources properly. Another study found that even students who understood the concept of plagiarism could not correctly identify plagiarized or not plagiarized passages. Similarly, different faculty members or departments can have different definitions of dishonest behavior or different ideas of what constitutes common knowledge. There are also many differences between disciplines on documentation guidelines. If these differences are not communicated clearly, students might not realize they are not meeting an instructor’s expectations.

In other cases, students understand and try to avoid plagiarism, but are not sufficiently skilled in writing. Some fail to take notes carefully, leading to inadvertent plagiarism. Others plagiarize unintentionally as they attempt to understand and make sense of a text. In their attempts to understand and re-state the material and to begin to adopt the language of academic discourse, novices often use too much of the original wording, a practice referred to as patch writing. However, patch writing is considered by many to be a form of plagiarism, which is then classified as academic dishonesty; thus, legitimate attempts to learn unfamiliar material are often classified as unethical behavior, despite student attempts to practice good scholarship.
Different understandings of academic conventions are particularly apparent with students who were educated in non-Western cultures. The belief that ideas and words can be owned by a person is a recent and “uniquely Western” concept\(^2\) that can be difficult for many international students to understand. Some students believe that they are in effect ruining the author’s words by paraphrasing. In addition, it is not uncommon in many countries for students to write papers by simply copying large chunks of text from writings by experts in the field, if they write papers at all. In some countries, students are not taught or expected to cite sources until they are in master’s or doctoral level courses, meaning that students who come to the United States for their graduate work may have never been exposed to our academic conventions for source citation\(^{18}\).

### Need for an Educational Framework

Clearly, the causes for today’s high levels of academic dishonesty in higher education are complex and stem from many sources. Thus, it is of great importance that we adopt a holistic institutional approach for addressing academic dishonesty\(^{19, 20}\). Education must be a significant component of any effort to create a culture of academic honesty. It is crucial that students, faculty, and administrators discuss academic honesty expectations, policies, and procedures so that a culture of integrity, learning, and teaching can be fostered in our higher education institutions\(^6\). This culture needs to be built on open communication and trust\(^2\), which will lead to a greater commitment by students to education in general and to the university specifically\(^{11}\).

As has been noted, in many universities, it is unusual for faculty to openly discuss with students what constitutes academic honest and dishonest behavior. At the same time, students often feel that their professors and the institution do not place much importance on academic honesty. Many times students feel like they have only a minimal relationship with their professors, perhaps due to very large class sizes. And they often feel that their peers are doing what needs to be done (i.e., cheat) to succeed in classes. Combined, these circumstances lead to students engaging in academically dishonest behaviors. What is needed, then, is a shift toward a culture that prioritizes integrity, teaching, and learning. At our university, we have begun to institute this change through a comprehensive, education-based approach.

Here we are outlining the educational preventative portion of our university’s approach. This approach focuses on increasing the benefits of ethical behavior rather than increasing the cost of unethical behavior, even though academic dishonesty still receives harsh consequences. Proactive approaches like this one are often more adaptable\(^{11}\) and involve the entire university community in uniting to form a culture of integrity, teaching, and learning. Students are encouraged to be active learners, to view academic dishonesty as a threat to their learning, and to feel a sense of responsibility toward their peers, faculty, and institution\(^{11}\). Universities that use this type of model report that students are proud of the environment of trust they feel with their professors and their institution, which is more likely to reduce instances of academic dishonesty\(^6\).

### Our Educational Framework

With an understanding of these research findings, we set out to develop an educational framework for promoting academic integrity in Ohio University’s Russ College of Engineering and Technology that involved student, faculty, and institutional roles.
**Students**

Finding ways to increase student involvement is often associated with more positive outcomes, especially when changing campus policies and working toward a culture of increased academic honesty. Moreover, research shows that students want their campuses to value academic integrity and can develop effective academic integrity policies or honor codes when given the appropriate authority and support needed to do so. Students’ feelings of involvement in and ownership of their education is an important factor that contributes to ethical behavior, and their role in cultivating a culture of learning and teaching through the implementation of policies is crucial. Thus, we began by deliberately seeking ways to heavily involve students in all academic honesty initiatives.

**Required writing courses:** As our literature review suggests, a primary reason for plagiarism is that students do not fully understand or have not had adequate practice needed to master academic writing conventions. Engineering undergraduate students typically take fewer writing courses than other college students, and research writing courses are rarely required for graduate students. Moreover, expectations for writing and source citation are more stringent for graduate students than for undergraduates, especially when writing theses, dissertations, and articles for publication. Considering these norms, as well as recognizing that a high proportion of engineering graduate students at our university come from other countries that have fewer or different expectations for source citation, the Russ College of Engineering and Technology began to require that all incoming graduate students take a technical writing course (see Appendix for sample syllabus). In this class, an emphasis is placed on teaching the academic conventions that students are expected to follow and on creating a shared understanding of what plagiarism is and how to avoid it. Case studies are used to serve as a springboard for discussion about the complex issues involved in defining plagiarism. Students are then given opportunities to practice summarizing, paraphrasing, quoting, and citing the work of others, sharing their writing with each other and helping each other identify potential problems. They also practice synthesizing and critiquing ideas from different sources. For international students desiring more practice with graduate-level writing, more in-depth classes are also available. Feedback on the course has been very positive.

**Student Academic Honor Council (SAHC):** Since academic research shows that student involvement is necessary for the success of an academic integrity policy or honor code, we wanted to invite students to develop policies and help guide college-wide efforts to promote academic integrity from the beginning. A graduate student who was already conducting research on academic honesty was appointed as the Academic Honesty Advisor to help coordinate the academic honesty initiatives and efforts, and undergraduate and graduate students in the Russ College of Engineering and Technology were invited to join the Student Academic Honor Council. Though advised by the Academic Honesty Advisor, the SAHC was given a great deal of authority in defining its role and responsibilities. The group began by learning more about academic honesty, both through presentations by the advisor and through individual research that members then shared with the group. To date, the SAHC has developed and adopted a charter and has begun planning outreach initiatives to educate student peers and promote a culture of academic honesty. It is expected that outreach efforts of a student group such as this one will
have a considerable impact since students are more likely to engage in academic dishonesty if they believe that their peers are doing the same\textsuperscript{23}.

Additionally, the SAHC has taken a leadership role in developing an honor code for the Russ College of Engineering and Technology. This honor code, which will be developed through the mutual efforts of students and faculty, will resemble a modified honor code like that suggested by Gary Pavela\textsuperscript{24} and will establish and reinforce responsibilities, definitions of academic dishonesty, expectations for ethical behavior, and policies. The SAHC has chosen to develop an honor code because such a code promotes a culture of academic integrity in which quality teaching and learning are prioritized while also establishing policies that deter academic dishonesty. Research has shown, “Serious test cheating on campuses with honor codes is typically 1/3 to 1/2 lower than the level on campuses that do not have honor codes. The level of serious cheating on written assignments is 1/4 to 1/3 lower”\textsuperscript{3}.

\textbf{Faculty}

Though student involvement is of utmost importance in developing a culture of academic integrity, faculty also play a critical role. Indeed, students’ lack of understanding about academic expectations\textsuperscript{14} and their belief that there will be no consequences for cheating or plagiarizing\textsuperscript{8} are two key factors that increase academic dishonesty, both of which are factors over which instructors have a great deal of influence. In \textit{Academic Dishonesty: An Educator’s Guide}, Whitley and Keith-Spiegel\textsuperscript{2} recommend that instructors discuss integrity with students and create a positive and fair climate in the classroom so that students will be motivated to act ethically. McCabe, Trevino, and Butterfield\textsuperscript{6} agree that trust and respect are important in the classroom and also recommend that faculty focus on learning rather than grades, create interesting and substantive assignments, clearly communicate what they consider to be dishonest behavior, develop clear policies and procedures for dealing with dishonest behaviors, and make it difficult for students to be dishonest.

\textit{Faculty workshops on academic honesty:} Even though there is a large role that faculty can play, instructors are relatively unaware of the extent to which academic dishonesty exists and are often reluctant to report violations that they catch\textsuperscript{5}. In order to increase faculty awareness of academic dishonesty and of opportunities to promote academic honesty, as well as to give faculty an opportunity to provide feedback and help formulate policy, a series of three workshops was developed.

The goal of the first workshop, \textit{Complicating the Conversation}, was for faculty to discuss the complexities of plagiarism and academic dishonesty. We used case studies of ambiguous situations in order to help establish that there is a need to discuss definitions of academic dishonesty, to increase understanding of what views are held, and to give an opportunity for faculty to share ideas about how to address such cases through teaching.

The goal of the second workshop, \textit{Defining the Problem and Setting Standards}, was for faculty and students to discuss and establish definitions and expectations that can be commonly shared. Separate but identical sessions were held for students and faculty so that open feedback could be obtained from both faculty and students. In each session, attendees were given a draft of
definitions being developed by the Student Academic Honor Council and Faculty Academic Honor Council along with questions and a set of case studies on which to test the definitions. Attendees revised the definitions to include situations that are unique to engineering but often unaddressed in broader policies. This discussion was also an opportunity to discuss how teaching and advising practices can incorporate such definitions and standards to teach students about academic conventions.

The final workshop, Implementing Standards and Procedures, will bring students and faculty together in the same session to help set and plan the implementation of college-wide standards. Initial drafts of plans created by the SAHC and FAHC will be shared with the participants so that the entire community can share ideas to revise and improve those initial ideas. The goal of such a session is to help the new policies stem from a true community effort, to increase early participation and later buy-in, and to bring faculty and students into dialogue with one another to begin to bridge the understandings and expectations of both groups.

Faculty Academic Honor Council (FAHC): The Faculty Academic Honor Council was formed to work with the SAHC in developing initiatives and policies, including an honor code, that promote a culture of academic integrity. The FAHC is also considering ways in which teaching and institutional practices can either promote or prevent academic dishonesty, and then making recommendations and developing resources to help all faculty promote quality teaching, learning, and academic integrity. Like the SAHC, the FAHC was given a great deal of latitude in determining its role and responsibilities, and began by developing a charter and statement of faculty responsibilities.

Institution

The focus on integrity, teaching, and learning outlined in this paper is being emphasized in the Russ College of Engineering and Technology because of the support of the administration, which is crucial for such projects to succeed. However, academic integrity should also be a concern and priority for entire institutions, not just Colleges of Engineering and Technology. Because of the situation Ohio University found itself in, many university-wide initiatives, including a university honor code, are being developed. Thus, it has been important to coordinate the efforts within the Russ College of Engineering and Technology and across the entire university to minimize the duplication of efforts and to ensure that initiatives complement rather than contradict each other. Since it is easier to make changes on a smaller scale than for an entire organization, efforts within the Russ College of Engineering and Technology have been more specifically targeted and have been developed more quickly than those for the entire university. Because of this, our college-wide efforts can serve as a pilot for other efforts across the university, while some early university-wide changes might eliminate the need for college-initiated steps toward addressing those specific concerns. By having an Academic Honesty Advisor who is working on efforts at both levels, we have been able to work to ensure that both groups are aware of the others’ plans and activities to help keep efforts complementary.

Meanwhile, an Academic Integrity Committee was appointed by the Provost to address academic honesty issues at the institutional level. During the time frame discussed in this paper (one academic quarter), this committee held a Day of Discourse in which students, faculty, and
administrators across campus were brought together to discuss academic dishonesty and to suggest ideas for addressing it. A Chairs and Directors’ survey was conducted to assess efforts already underway across campus so that successful extant practices could be shared among departments. Several courses began to participate in a pilot to use Turnitin.com as a pedagogical rather than just a plagiarism-catching tool, in which students submitted first drafts to find out where there might be writing problems, then submitted revisions as final drafts to ensure that potential plagiarism problems were addressed. Additionally, University Judiciaries drafted a proposal for procedural changes that would facilitate a better handling of academic misconduct cases, and a group of students developed an initial honor code draft.

Moreover, assessments to gauge changing behavior and attitudes toward plagiarism will continue over the next several years. Just before the allegedly plagiarized theses were brought to the public’s attention, a university-wide survey of academic dishonesty based on the work of Don McCabe was conducted, which will serve as a baseline against which future measurements can be compared. This survey will be repeated annually throughout the implementation of these initiatives to collect longitudinal data. Additional survey assessments were completed by students in the Russ College of Engineering and Technology at the end of the fall quarter of this year and will be repeated periodically in the future. Qualitative and discursive data in the form of newspaper articles, news broadcasts, interviews, public documents, and ethnographic field notes are also being collected and will be used to identify changes in the way that the Russ College of Engineering and Technology and Ohio University community think and talk about academic integrity as we work to change the academic culture.

**Looking Ahead**

This paper presents a comprehensive education-based approach to combating the problem of academic dishonesty on the campus of Ohio University, focusing on the roles that students, faculty, and the institution can play in order to facilitate the development of an environment of integrity, teaching, and learning. While there are no clear and easy answers to avoiding academic dishonesty in universities today, the way our university has chosen to move forward is through focusing on dialogue and the development of a shared culture committed to education and learning. Moreover, as a community, we are clearly defining academically honest behavior and outlining the consequences of dishonesty. Changing cultures can be a time-consuming and lengthy process, but successful cultural change can occur when all interested groups participate to build an environment based on a shared vision.

**References**

Appendix

SAMPLE Syllabus Technical Writing Seminar (abbreviated)
(10 week course)

Instructor information:
Credit hours: 1 credit hour  Credit/No Credit course


Course Description
Employing texts drawn from engineering, this course provides guidance to students who are preparing to write their thesis or dissertation. Students practice organizing and synthesizing ideas, with special attention being given to correctly using and referencing the work of others. The writing assignments focus on a single topic of the student’s choosing. Emphasis is placed on the style of writing appropriate for academic discourse in engineering.

Outcomes
After completing this course, students should be able to:
1. Understand the value of academic honesty and the rules governing it.
2. Demonstrate the capacity to integrate secondary sources in a critical, evaluative, logical, and analytical manner.
3. Show the ability to integrate summary, paraphrase, and direct quotations from secondary sources written for a university audience.
4. Understand writing as a process involving multiple drafts and editing.
5. Work toward developing individual skills to express ideas clearly.

While this course will help students work toward developing their writing skills, ongoing support from faculty and advisors and students’ own decisions to adhere to academic honesty standards are crucial in the production of high-quality written work.

Course Assignments
Thesis critique assignment 15%
Annotated Bibliography 15%
Paper Outline 15%
Paper draft 20%
Paper final 20%
Participation & Homework 15%

Course Grade and Policies
The course is Credit/No Credit. A final course grade of B- or higher is required to receive Credit. Grades are based on assignments and on class attendance. More than 1 unexcused absence
results in the course grade being lowered. Two absences result in the course grade being lowered one step (e.g., A to A-), 3 absences result in the grade being lowered 2 steps (e.g., A to B+). Coming to class more than 10 minutes late is marked as an absence.

**Academic Honesty**
The Student Code of Conduct prohibits all forms of academic dishonesty, which include cheating and plagiarism. Also, for this class, papers that students turn in must reflect the work of that student only, and not of any proofreaders. Academic honesty will be introduced and practiced in this class. If, after the class has covered this topic, a student engages in course-related academic dishonesty in this class, the student’s grade for the paper will be lowered, the student’s advisor may be notified, and the case may be submitted to the Office of Judiciaries.

It is very important that you are careful with the citing of your sources. If you copy any direct quotes from a website, article, book, etc., remember to put the words in quotation marks and also state the source (following guidelines from the textbook). When you paraphrase someone else’s words, be sure you change the sentence structure and wording significantly and then also state the source. Be sure to ask if you have any questions.

**Writing Assignments**

**Annotated Bibliography**
Following the guidelines presented in class, create an annotated bibliography with at least 5 sources. Very few, if any, direct quotations should be in your annotated bibliography. If you quote a source exactly, be sure to put the words in quotation marks. Turn in all sources with the assignment, with any paraphrased material underlined on the source copy. Turn in the paper digitally on the course Blackboard site and a hard copy.

**Paper Outline**
The purpose of creating this outline is to help you organize your thoughts as you begin to write your final paper. Create you outline according to the guidelines for a formal outline in Mayfield pp. 21-23. Be sure to include all your sources in the outline and also create a reference list, carefully following either the numerical or author-date system. Turn in digitally only, to course Blackboard site.

**Paper Draft**
Following the material covered in class, write at least 2 pages of a literature review based on the outline you created. Use at least 3 sources. Be sure to organize your ideas logically and provide sufficient support for each idea. Be sure to cite all your sources in the text and also include a reference list following either the numerical or author-date system. If you quote a source exactly, be sure to put the words in quotation marks as well as including the source. Turn in all sources with the assignment, with any paraphrased material underlined on the source copy. Turn in the paper digitally on the course Blackboard site and a hard copy.

**Paper Final**
Revise and expand the draft of your paper. Use at least 4 sources. Turn in all sources with the assignment, with any paraphrased material underlined on the source copy. Turn in the paper digitally on the course Blackboard site and a hard copy.