Report from the Templeton Fellows

The following article and interviews were originally published in the Law and Policy Report by Gary Pavela (March 2007, Nos. 246-248, electronic edition). The arrangement of articles consists of an introductory overview by Appalachian State University Assistant professor Diane Waryold, followed by short summaries and analysis from each of the five researchers. Please scroll to the conclusion of the article for interviews with each researcher.

The Missing Links of Academic Integrity Research: Moral Development, Moral Education, and Institutional Cultures
By Diane Waryold

(Assistant Professor of Human Development and Psychological Counseling at Appalachian State University; past Executive Director for The Center for Academic Integrity and Program Administrator for The Kenan Institute for Ethics at Duke University).

History and Goals of the Program

In September 2003, Dr. Elizabeth Kiss (former Director of the Kenan Institute for Ethics at Duke University) and Dr. Diane Waryold (former Executive Director of the Center for Academic Integrity, housed at Duke University), submitted a grant proposal to the John Templeton Foundation for their consideration. The purpose of the grant focused on the Center for Academic Integrity's (CAI) vision in creating a stronger and more vibrant research agenda aimed at producing the knowledge necessary to improve academic integrity and ethical behavior in schools and universities across the nation. By submitting this proposal, the CAI was asking the John Templeton Foundation to support efforts of the Center to establish (5) research scholars' positions whom would take on this initiative. The Templeton Fellows would be made up of both established and emerging academic researchers with an interest in studying academic integrity at both the high school and collegiate levels. In other words, CAI would create a vibrant research agenda by "growing their own" scholars to study problems and challenges in academic misconduct confronted in schools, colleges and universities.

 In November of 2003, CAI was pleased to be awarded $155,636.00 to support the above mentioned grant proposal. CAI immediately launched the initiative by formulating a plan to recruit a multidisciplinary team of research scholars to receive the Templeton Research Awards. The award was announced and marketed to a broad audience throughout the United States through the creation of a web page and the design of a poster and other print materials. CAI received on line applications from a deep and competitive applicant pool (n=36 applications). CAI pulled together a selection committee of four distinguished scholars and educators to assist in choosing a first-class team of fellows. Materials were copied and sent to the selection committee for their review. A conference call was convened and after careful deliberations, the selection of the five Templeton Fellows followed. The following individuals were selected to receive the awards.

1. **Dr. Trevor Harding** – Associate Professor of Industrial and Manufacturing Engineering, Kettering University (now an Associate Professor of Materials Engineering at California Polytechnic State University).
2. **Dominic Sisti**- Research Assistant, Center for Bioethics, University of Pennsylvania (now a doctoral student in philosophy/bioethics at Michigan State University).
3. **Scott Wowra**- doctoral student, Department of Psychology, University of Florida. (now Dr. Scott Wowra, employed by the Council of Graduate Schools in Washington, D.C).
4. **Ashley Mouberry-Sieman**- doctoral student in Higher Education, North Carolina State University
5. **Dr. Jason Stephens**- Assistant Professor of Educational Psychology, University of Connecticut

The summer following the selection of the Templeton Fellows, a Research Institute was held at Duke University. The purpose of this Research Institute was to bring the Fellows together for the first time to provide a forum for cross-disciplinary conversations and collaboration among the Fellows and a group of carefully selected faculty. The faculty consisted of an inter-disciplinary team of academicians from Duke University, Rensselaer Polytechnic University (RPI), Rutgers University and the University of Maryland. The Institute took place over a 4-day period in which the Fellows shared their research proposals, gathered feedback on these proposals, and attended workshops delivered by the faculty on substantive issues pertaining to academic integrity. The Fellows engaged with the faculty in lively debates on issues such as the definition of cheating, the gap between beliefs and behaviors, and internalizing ethical beliefs. A tightly knit research cluster was formed and the tone was set for a successful initiative.

In summary, over a three to four year period, the Templeton Fellows were given multiple opportunities to be mentored by a diverse and distinguished group of faculty. The Fellows formed a tightly knit research cluster in which they taught and learned from one another. The Fellows created a stronger and more vibrant research agenda and produced new knowledge that will be used to improve academic integrity and ethical behavior in schools and universities across the nation.

A Comparison of Academic Dishonesty between the Humanities and Engineering Disciplines

Trevor S. Harding, Matthew J. Mayhew, Cynthia J. Finelli, Donald D. Carpenter

ABSTRACT

Engagement in academic dishonesty, or cheating, could be considered one measure of the extent to which students engage in unethical behavior. Sadly, the research literature consistently shows that engineering undergraduate students are among those most likely to cheat while in college. The present study examines the factors underlying engineering students' engagement in cheating as compared to those of humanities students, within the theoretical framework of the Theory of Planned Behavior. The study surveyed 527 randomly selected engineering and humanities undergraduate students from three academic institutions. Comparison between engineering and humanities students showed that both groups were equally likely to cheat in high school, but that engineering students were statistically more likely to cheat in college on both homework and exams. The higher rate of cheating among engineering students was correlated to the intention to cheat again in the future, a positive attitude toward cheating, less perceived moral obligation to avoid cheating, the sense that cheating was accepted among one's peers, and a tendency to have cheated in high school.

Practical advice for educators

Cheating in both high school and college has been commonplace for decades. Numerous researchers have explored possible explanations for this wide-spread behavior, with some success. However, very little research has focused on differences in cheating between disciplines. For example, college students in engineering and business consistently report higher levels of cheating than students in humanities and the arts. The goal of our research was to compare the cheating behavior of engineering and humanities undergraduates to identify possible psychological explanations for the higher reported cheating among engineering students. To accomplish this task, we used a decision-making framework from the social psychology literature known as Ajzen's Theory of Planned Behavior (TPB). The TPB is a validated model of human decision-making and behavior and is, therefore, well suited for use in our study.

The results of our research confirmed the use of the TPB to predict, with reasonable accuracy, an individual's intention to engage in cheating and the likelihood with which that individual will actually follow-through with that intention. Based on the fundamental assumptions of the TPB, this suggests that, rather than being habitual (as some researchers have suggested), cheating is a rational behavior that is under the complete control of the individual. Thus, if the factors that most influence an individual's decision to cheat can be successfully modified, the individual can be expected to make a rational decision. One practical implication of this finding is that educators can reduce cheating by simply discussing the issues rationally with students and addressing the underlying influences for their behavior. According to our research, there are three dominant factors that influence an individual's intention to cheat:

- moral obligation (the sense that one is obligated to do what is right and good),

- attitude toward cheating (the sense one has that there will be positive or negative outcomes if he/she engages in cheating), and
- subjective norms (the sense that people who are important to the individual, such as parents, peers, and instructors, will react favorably or unfavorably if the individual engages in cheating). This implies that, when discussing cheating with students, college and high school educators must frame the conversation in terms of these three important factors.

In particular, educators must help students understand that it is both their and the instructor's moral obligation to protect the integrity of their learning community. The classroom environment must be such that the students are empowered to learn on their own and do not see the instructor as the ultimate authority in the classroom. In this way, the students take responsibility for their own learning and will be less likely to rationalize cheating because "the teacher deserved it". In this model, the instructor serves more as a coach than a teacher. One pedagogical technique that may be well-suited to achieving this, particularly within the engineering and science disciplines, is project-based learning. Here the students are provided a problem to solve or device to construct, but are not given the necessary information to complete the project. Instead, students are expected to seek this information out on their own with coaching from the instructor and occasional brief "lectures". This method has been shown to effectively motivate students to learn the immediate subject and to help them develop life-long learning skills. And since the projects are usually complex problems or systems, copying from another student is nearly impossible. Additionally, in our experience, we have found that the motivation level produced through project-based learning is so high, that few students even consider cheating an option.

Interdependence among students is another effective means of reducing cheating in the classroom that is in keeping with our finding that subjective norm is a strong predictor of a student's intention to cheat. When students work in teams on complex problems or projects, they usually discover that each student is dependent on his/her team members in order to successfully complete the project. This sort of interdependence among the students creates a culture in which the students hold one another responsible for learning the material, and removes the instructor from the role of enforcer. Techniques such as group quizzes, combining individual homework scores, group presentations and reports, and peer evaluations are effective ways of developing a sense of interdependence within teams.

Educators must also have open and honest conversations about the positive and negative implications of cheating, thereby addressing students' attitudes toward cheating. Opportunities where the instructor facilitates a discussion among the students on the short- and long-term consequences of cheating can be effective in helping students realize that cheating does have consequences for people other than the cheater. Instructors must create an environment where students can feel free to be honest about cheating and not threatened that they will be "turned in" for admitting past discretions. It is also important for the instructor to clearly demonstrate that what they really care about is the students' learning. Most students will tell you that they cheat because the instructor doesn't really care about them, so why should they care about following the rules. This method of neutralizing their own culpability is typical, and can easily be eradicated by an instructor that displays true passion for the students' success.

A secondary finding from our research is that engineering students reported cheating more often on tests and homework than did humanities students (even when controlling for the number of opportunities to cheat), while

both groups of students were equally likely to cheat in high school and both groups cheated less often in college than in high school. This suggests that engineering students, after entering college, remain more likely to cheat than do humanities students. Though we do not yet know the specific reasons for this finding, our anecdotal observations have lead us to hypothesize that engineering is a vocationally-oriented discipline in which many students enroll because they know that is how they will get a job while humanities students are more deeply engaged in the learning for its own sake. This raises the implications of engineering students' long-term ethical decision-making once they acquire a job. From a practical perspective, this further underscores the importance of affecting the underlying ethical decision-making process of engineering undergraduates.

An alternative hypothesis comes from our own data in which engineering students had lower overall moral reasoning aptitude scores both before and after leaving college than did humanities students (in fact, engineering seniors had lower aptitude at moral reasoning than did the first year humanities students). This implies to us that engineering students experience less cognitive development in the moral domain than do humanities students and that the engineering curriculum lacks sufficient opportunities for students to interact with peers on challenging moral questions. Thus, educators may be able to affect this development by introducing into the engineering curriculum opportunities for students to gain the ability to recognize a moral dilemma, resolve the moral dilemma in its new context, and have the motivation to follow through with ethical decisions. This may require better integrating the liberal arts and engineering curricula, an approach which is crucial to preparing engineering students to face the technologically-driven ethical dilemmas of the 21st century.

Academic Integrity Seminar
A Student Development Resource

Student perspectives on Internet plagiarism
By Dominic Sisti

ABSTRACT

Internet plagiarism continues unabated and may even be increasing. Questions pertaining to the ethical-moral construct employed by high school students to justify such plagiarism have remained relatively untouched. Understanding not simply the prevalence of Internet plagiarism but also the variety of explanations used by students to justify their plagiarism seems crucial to curtailing its practice. In this study, I surveyed 160 high school students and I endeavored to understand and describe the practices of students who use the Internet for schoolwork and who engage in copy-paste plagiarism or paper buying practices. The results indicate that students are more easily able to justify copy-paste plagiarism for a variety of reasons that mirror justifications of other forms of conventional plagiarism. Most students indicated they would never purchase a paper for reasons ranging from fear of getting caught to more principled and nuanced ethical claims.

Practical advice for educators

Rethink writing assignments: If you assign traditional research or term papers, consider a change by capitalizing on students' computing skills and creativity. Ask students to design a web site or multimedia presentation on a particular topic. Another idea is to ask students to interview a scholar in an area that interests them relevant to the course. For example, a bioethics student who wants to learn more about the ethical dimensions of stem cell research might email a scholar in the field of bioethics, interview her, and then create a website containing the interview, background information, video and multimedia, and suggested links for further research. Again, the key here is to offer an alternative to the traditional research paper that capitalizes on students' penchant for electronic communication and creativity.

Require synthesis: Students are less likely to plagiarize if they know they will need to present their projects to the class. The usefulness of this method was reflected in student responses to a survey I recently conducted, in which one student described why they would not plagiarize: "…[w]hen I write, I try to remember that some teachers are likely to ask you to read your paper aloud." Go further and ask the student to not simply read their work aloud, but describe it in an impromptu fashion. Students will need to have a working knowledge of the material. And if used in conjunction with the above assignment ideas, students can have a lot of fun showing off their creativity to the whole class.

Encourage group work: Many teachers worry that students working together on assignments is tantamount to cheating. Certainly there are problems: the one student in the group not pulling their own weight or the dominant group "leader" seizing too much control from the others. But overall, it seems group work, when constructed effectively can be a positive experience. Indeed, students spend many of their evening homework time online chatting with two, three, even a dozen friends at once. (How they manage to keep these concurrent conversations straight is beyond me.) Encourage students to work together, using in person meetings and instant messenger to accomplish the goals of a specific research project. Group exercises when managed well can engender a sense of collegiality among students, foster a sense of peer-to-peer accountability, strengthen

leadership skills, and maybe most importantly, prepare students for jobs in the "real world" where group work is typically the norm, not the exception.

Be positive: An instructor's genuinely positive attitude can go a long way. Students will feel empowered to do their own work and feel comfortable approaching you with their questions or difficulties if you convey a sense of optimism, openness and reasonable flexibility. If possible, when grading assignments, transform critical comments into constructive ones by allowing students to respond and to revise their work.

Be accessible: Students who cheat often complain that their teachers were not available to help and they therefore feel somewhat justified in plagiarizing. Of course, this excuse does not justify cheating, but it does compel us to think about ways to be available for our students. If you are available to your students as a writing coach, and you encourage them to visit with you regularly, they will take ownership and pride in their writing projects; plagiarism will become a nonissue. I sometimes hold online "office hours" during which time students can chat with me about an assignment. Being accessible – even if sometimes only virtually- is crucial to building the respectful relationship you have with your students and will empower students to work with integrity.

For Further Reading

A bibliography of academic integrity literature at St. Mary's University is available at:
http://www.smu.ca/administration/library/facultyplag.html

Hunt, R. (2002). Four reasons to be happy about Internet plagiarism. Teaching Perspectives, 5,1-5. Available at: http://www.stthomasu.ca/~hunt/4reasons.htm [This paper is controversial but offers creative ways to reconceptualize assignments.]

These are a few term paper mills. Check them out; see how they work. Drop a few names and mention what you know about them to your students. Openly acknowledging your familiarity with these sites will serve as a disincentive for students to use them.

- http://www.non-plagiarized-termpapers.com/
- http://www.cheathouse.com/
- http://www.acceptedpapers.com/
- http://www.samedayresearch.com

Moral Identities, Social Anxiety, and Academic Dishonesty among American College Students
By Scott A. Wowra , Ph.D.

ABSTRACT

The present investigation examined how reports of academic cheating related to students' emphasis on their moral identities and their sensitivity to social evaluation. Seventy college students at a large southeastern university completed a battery of surveys. Symptoms of social anxiety were positively correlated with recall of academic cheating. Additionally, relative to students who placed less importance on their moral identities, students who placed more importance on their moral identities recalled significantly fewer instances of cheating. In summary, these findings suggest that students are less likely to cheat on their school work when they place greater emphasis on their moral identity and are less sensitive to social evaluation.

Practical advice for educators

The importance of being honest. College students disagree over the importance of honesty versus getting what they want. In this survey study, students who regarded honesty as much more important than personal profit were assigned to the "Principled" Group. Students who believed that personal rewards trumped honesty were assigned to the "Expedient" Group. The two groups then recalled how often they had cheated in high school. The statistics were telling. Nine out of 10 Expedient students (91%) recalled cheating on their school work, compared to about half of Principled students (57%). This finding suggests that differences in moral reasoning affect the propensity to cheat on school work. College administrators should consider mandating moral education in the first-year curriculum. College students should receive compulsory moral education early and often during their academic careers. Required coursework in moral reasoning signals to students the importance of character-building to their personal development as well as the continuation of a democracy.

A web of lies. Academic dishonesty is positively related to other forms of deception. Students completed a survey of antisocial behavior, including lying, infidelity, stealing, and fraud. Academic cheating was positively correlated to all of the antisocial behaviors measured in the study. Some college students may rely upon academic cheating as part of a general action pattern of deceit. College educators who design interventions for academic cheating should keep in mind that addressing academic cheating may only be achieved by broadening the scope of the intervention to the student's choice to deceive across a variety of situational contexts. Students should be asked to think critically about the situations in which they have relied upon dishonesty to get what they wanted, and how they could have achieved the same goal through honesty.

Cheating and drugs. Academic dishonesty was also positively correlated with drug use, including binge drinking and smoking marijuana. The correlation was .38, which suggests that about 14% of the variability in academic dishonesty was related to variability in student's use of drugs. Additional research is necessary to understand why drug use is related to academic dishonesty. Providing information about the possible link between academic cheating and health concerns may be an effective intervention among health-conscious students. Interventions designed to curtail one problem area may have a beneficial side effect of reducing the other problem area.

Anxious to get ahead. Failing a school assignment can be embarrassing. Some students may dread the humiliation of failing a school assignment so much that they will sacrifice their integrity to avoid embarrassment. In extreme cases, fear of social embarrassment constitutes an emotional problem that psychologists refer to as social anxiety. To test the social anxiety hypothesis of cheating, students completed a survey that measured symptoms of social anxiety and other emotional problems. Recall of cheating was positively correlated with the measure of social anxiety. Some students may cheat in order to regulate their anxiety over social embarrassment. Teachers and administrators should acknowledge that some students may rely upon cheating to assuage their fears of failure and embarrassment. By confronting these fears, students can take control of them and take steps to alleviate their anxiety through positive coping mechanisms such as exercise, meditation, or in more extreme cases, medication. In addition, openly acknowledging the link between anxiety and cheating eliminates this justification for cheating.

It's not my fault! Students differ in their ethical beliefs. In the survey study, students who believed that universal ethical principles exist, and that people are responsible for adhering to these ethical principles, reported significantly fewer instances of academic cheating compared to students who claimed that ethical principles are relative, deception is often justified, and that what's important is getting ahead. Taking personal responsibility for (un)ethical behavior is an important stop-gap to cheating. During orientations and the first day of class, college administrators and teachers need to clearly state the school's policies against cheating and that there is no excuse for academic dishonesty. By setting these ethical expectations early, college students will find it harder to neutralize their unethical behaviors.

Further research needed. Fostering personal responsibility is an important defense against cheating behavior. More research is needed to determine how instilling personal responsibility in students is best accomplished. First, interventions of academic dishonesty require clear statements that students are responsible for their own behavior, good and bad, and that there is no excuse for cheating. Second, students will benefit from training in ethical reasoning that emphasizes personal responsibility and undermines the propensity to engage in excuses and justifications for unethical behavior. Third, interventions should remind students that taking academic short cuts will only undermine their personal sense of accomplishment and ability to succeed in the "real world."

Academic dishonesty across the transition from high school to college.
By Ashley Mouberry-Sieman

ABSTRACT

Much of the existing research on academic dishonesty is focused on examining high school or college students' perceptions, attitudes, and behaviors at one fixed point in time. Longitudinal cohort-based research on academic dishonesty is virtually non-existent due to the fact that longitudinal research is costly, time consuming, and difficult to manage. However, despite these inherent challenges, the insight gained from longitudinal analysis is unique in that it sheds light on how student attitudes and behaviors change over time and across educational settings. This study was unique in that it examined the issue of academic dishonesty across the transition from high school to college. This study was conducted in three phases. The first phase consisted of a 21-item pre-test questionnaire, which was administered during the spring of 2004 to a cohort of 240 high school seniors attending an elite public residential high school on the eastern seaboard of the United States. Phase one yielded a response rate of 15%. Phase two consisted of an identical 21-item questionnaire, which was administered to the 36 respondents from phase one, during the fall of 2005 after they had completed one full year of college. This phase yielded a response rate of 58.8%. Phase three consisted of a small pool of 5 students who agreed to participate in individual qualitative follow-up interviews late during the fall 2005. This study found that some of the students included in this study changed their perceptions, attitudes, and behaviors related to academic dishonesty as they made transition from high school to college. Additional research in this area will serve to fill a key gap in our existing knowledge base and will increase our understanding of age appropriate strategies for addressing dishonesty and promoting integrity within all levels of our educational system.

Practical advice for educators

Teachers/professors play an important role in both deterring academic dishonesty and promoting a climate of integrity.

In this study, students emphasized the role that teachers play in both deterring academic dishonesty and promoting a climate of integrity. Students at both the high school and college levels felt that educators (i.e., teachers and professors) were ultimately responsible for setting and enforcing the standards of academic conduct in the classroom. Students in this study suggested several steps that educators can take to deter academic dishonesty in the classroom, including but not limited to: explicitly stating what does and does not constitute academic dishonesty, not assigning what is perceived to be "busy work" for homework or other assignments, using multiple versions of exams, not repeating major assignments from year to year, and closely monitoring the classroom environment during exams. Students suggested that educators promote academic integrity by discussing its importance throughout the semester/year and reemphasizing its importance for each major assignment.

Understanding and detecting plagiarism.

Plagiarism seems to be an issue that plagues both high school and college students alike. While all of the students in this study agreed that purchasing or copying an entire paper and submitting it as one's own was considered to be academic dishonesty, there was disagreement about whether or not changing the wording slightly from an original source while working on a paper or project or copying another student's homework or lab assignment and submitting it as one's own should be considered academically dishonest. Clearly more work needs to be done to help students at both the high school and college level understand what constitutes plagiarism and how to avoid it.

Educators should not assume that students arrive at their institutions with a common understanding of what constitutes plagiarism. Each semester/year, each educator should discuss what constitutes plagiarism in his/her classroom. Ideally, each institution will have a commonly agreed upon definition of what constitutes plagiarism so that students are able to receive a consistent message from one classroom to the next. Educators should provide examples of common forms of plagiarism and provide exercises designed to help students avoid plagiarism. One form of plagiarism that appears to cause a lot of confusion for students is self-plagiarism (i.e., turning in the same paper for more than one class). Educators should be explicit about when and under what circumstances this practice is acceptable. Educators should also structure assignments so that they are able to observe a students' progress throughout the semester (i.e., asking a student to turn in multiple drafts of an assignment). This practice will also deter students from completing assignments at the last minute.

In addition, educators should also talk to students about how plagiarism is detected. In one of the follow-up interviews, a student in this study discussed the impact of knowing that the teachers in his department submitted all student papers to turnitin.com as a way to check if any portion of the paper was plagiarized. Another student discussed the fact that professors in the computer science department used a computer program to identify copied code in computer science projects. Knowing that their teachers/professors checked student papers and assignments for plagiarism was a clear deterrent for academically dishonest behavior.

Academic dishonesty in the scientific laboratory.

Another gray area for students was the scientific lab report. Many of the students in this study reported that making up or faking data in a scientific lab report should not be considered academically dishonest. This finding is particularly disturbing knowing that so many professions and fields of study depend on the production and reporting of credible scientific data. When asked in follow-up interviews to discuss lab reports, many of the students described them as a kin to homework and other types of "busy work" that just needed to get done. Students rationalized their dishonesty in lab assignments by blaming the instructors for grading based on the accuracy of findings. These findings suggest that educators should reconsider how they structure, present, and grade work in the scientific laboratory. More emphasis should be placed on the process, careful lab procedures, and a through discussion of the results and why they may differ from experiment to experiment or from person to person. One strategy could be to have two students compare their results and discuss reasons for differences in their findings. Instructors should also work to situate experiments in real world examples and discuss the implications of academic dishonesty in real world settings.

Honor codes emphasize the institutions' values and priorities.

Prior research has shown that honor codes may be an effective tool for decreasing the prevalence of academic dishonesty on both high school and college campuses. Students in this study discussed noticeable differences in their environment with respect to academic dishonesty during the transition from a high school with no honor code to a high school with an honor code. At the no-code institutions, honor and integrity were rarely discussed and cheating was thought to be prevalent on tests and major assignments. At the honor code high school, students understood that academic integrity was an institutional value and that academic dishonesty was not tolerated. Students noted that having an honor code in high school prepared them well for the honor code environment that they encountered in college. These findings suggest that both high schools and colleges should consider instituting an honor code or integrity policy on their campus if one does not already exist. While honor codes and integrity policies are useful tools for emphasizing the institution's values and priorities, when used alone the do not serve as effective deterrents for academically dishonest behavior. Many of the students in this study who were attending honor code institutions admitted to engaging in behaviors even though they knew that they were academically dishonest.

Academic dishonesty as an individual or institutional issue?

Students in this study had difficulty articulating the "issue" with academic dishonesty. When asked if and why one should be concerned about academic dishonesty students most often brought up the issue of fairness. For example, if a class was graded on a curve, students felt it would be unfair for someone who was dishonest to "break the curve" after getting a higher grade than he/she deserved. However, when dishonesty by other students did not directly impact a student's own grades (i.e., homework assignments) he or she was less concerned with and less likely to address dishonest behavior. In fact, several students readily admitted to helping a friend who was in a pinch on homework and other minor assignments. In general, students did not feel that it was their place to address academic dishonesty or to report academic dishonesty to an educator. Ultimately, students viewed academic dishonesty as an individual issue.

In order to truly create a climate for integrity, educators need to help students understand that academic dishonesty is more than an individual issue. Educators need to empower students with the tools necessary to engage in conversations with their peers related to the importance of honor and integrity. Educators need to help students understand how dishonesty by one person in the community impacts all individuals in the community.

Directions for future research

Longitudinal research
Much of the existing research on academic dishonesty is focused on examining high school or college students' perceptions, attitudes, and behaviors at one fixed point in time. This study was unique in that it examined the issue of academic dishonesty across the transition from one educational setting to the next. Longitudinal cohort-based research on academic dishonesty is virtually non-existent due to the fact that longitudinal research is costly, time consuming, and difficult to manage. However, despite these inherent challenges, the insight gained from longitudinal analysis is unique in that it sheds light on how student attitudes and behaviors change over time and across educational settings. Additional research in this area will serve to fill a key gap in our existing knowledge base and will increase our understanding of age appropriate strategies for addressing dishonesty and promoting integrity within all levels of our educational system.

Mixed-methods research
Much of the existing research on academic dishonesty is quantitative in nature. In recent years however, an increasing number of researchers have begun to utilize qualitative research designs to study the issue of academic dishonesty. Despite the fact that academic dishonesty has been studied using both quantitative and qualitative designs, very few researchers have utilized a mixed-methods approach to explore this topic. Utilizing a mixed-methods approach provides researchers with the best of both worlds by drawing on the strengths and eliminating some of the weaknesses of both qualitative and quantitative methodology.

Resources for further reading and thinking about academic dishonesty

Gallant, T.B., & Drinan, P. (2006). Organizational theory and student cheating: Explanation, responses, and strategies. The Journal of Higher Education, 77(5), 839-860.

> This article puts a new slant on academic dishonesty research by examining the issues of academic dishonesty through an organizational/theoretical lens. The authors suggest that academic dishonesty should be viewed as an "adaptive problem" as opposed to a "technical problem." The authors present six change strategies for developing and promoting an institutional climate of integrity.

Lathrop, A., & Foss, K. (2005). Guiding students from cheating and plagiarism to honesty and integrity: Strategies for change. Westport, CT: Libraries Unlimited.

> This book is full of practical suggestions for parents, teachers, and students who are interested in creating institutional climates of integrity. The authors have utilized student voices to help illustrate what influences students' decisions to engage in academic dishonesty. The "COPY ME" pages are particularly useful in that they provide resources, practical suggestions, and discussion tools for parents and educators.

Pascarella, E.T. (2006). How college affects students: Ten directions for future research. Journal of College Student Development, 47 (5), 508-520.

> In this article Pascarella identifies and discusses several directions for future research on college students. Many of these suggestions are applicable to our research on academic dishonesty. Specifically he suggests that we need to (1) focus on the quality of the data or information being analyzed, (2) reassert the importance of replicating findings, (3) investigate the full range of impacts of information technologies, (4) map the role of within-college experiences on life after college, and (5) continue to take periodic stock of the research literature to establish where we are and where we might go.

Missing Links in Academic Integrity: Educational Implications and Future Directions
By Jason M. Stephens, Ph.D.

ABSTRACT

The present study provides a comparative analysis of students' beliefs and behaviors related to six analogous pairs of conventional and digital forms of academic cheating. Results from an online survey of undergraduates at two universities (N=1,305) suggest that students use conventional means more often than digital means to copy homework, collaborate when it is not permitted, and copy from others during an exam. However, engagement in digital plagiarism (cutting and pasting from the Internet) has surpassed conventional plagiarism. Students also reported using digital "cheat sheets" (i.e. notes stored in a digital device) to cheat on tests more often than conventional "cheat sheets." Overall, 32% of students reported no cheating of any kind, 18.2% reported using only conventional methods, 4.2% reported using only digital methods, and 45.6% reported using both conventional and digital methods to cheat. "Digital only" cheaters were less likely than "conventional only" cheaters to report assignment cheating, but the former was more likely than the latter to report engagement in plagiarism. Students who cheated both conventionally and digitally were significantly different from the other three groups in terms of their self-reported engagement in all three types of cheating behavior. Students in this "both" group also had the lowest sense of moral responsibility to refrain from cheating and the greatest tendency to neutralize that responsibility. The scientific and educational implications of these findings are discussed in this study.

Practical advice for educators

Engage: Help students understand the value of what they're being asked to learn by creating learning experiences that connect with their interests and have real-world relevance.

Challenge: Help enhance students' motivation for learning by providing them "optimal challenges" (i.e., one's slightly beyond their current ability but attainable with individual effort and the support of more capable peers or adults).

Empower: When possible, give students a sense of control over the learning process and the products they create. There are many ways you can create opportunities for students to have a voice in what they are learning and some choice in how that learning is demonstrated and evaluated.

Play Fair. Create assessments that are fair and meaningful representations of what students should have learned. Make sure assessments provide informative feedback and thus contribute to improved performance. When possible, individualize evaluations of students' progress and offer them privately. Avoid practices that invite social comparisons of performance.

Showcase Character: Give students images of people who don't cut corners: scientists who discover things they don't expect because they approach their work with an impeccable respect for truth and a genuinely open

mind; business people who exemplify integrity even when it seems like it might cost them something. But don't preach. Take seriously the fact that, in some contexts, being consistently honest can be hard.

Be a Role Model. Finally, as educators, we must do our best to exemplify intellectual integrity ourselves—in everything from how we treat students and each other to how we approach the subject matter, to how we approach mandatory high stakes testing to how we think and talk about politics. We need to look for ways to make deep and searching honesty both palpable and attractive.

Specific strategies for reducing plagiarism and test cheating:

*Prevent Plagiarism***:** There several ways teachers can reduce the probability that students will plagiarize. First and foremost, all written assignments should be clear and manageable. Teachers may even want to provide list of specific topics and/or required components to narrow the opportunity for plagiarism. Probably the most effective strategy for preventing plagiarism to require process steps – a series of due dates that emphasize that writing is a process and help students manage their time more effectively. Many students turn to plagiarism (particularly Internet plagiarism) in the 12 to 24 hours before a paper is due. Process steps and due dates for identity a topic or thesis, generating an outline or annotated bibliography, and submitting a first draft (or doing a peer paper exchange) help prevent this kind of panic plagiarism.

*Reduce Test Cheating***:** Teachers can reduce the probability of test cheating in classes in several ways. As emphasized above, creating fair and reasonable exams is a critical first step, and clearly communicating the content and format of the exam is part of "playing fair" with your students. In larger classes, it is best to reduce temptation by using spaced seating, creating multiple forms (by randomizing order of questions and/or answers) and actively monitoring students (i.e., moving about the room). Finally, given the recent rise – in both popularity and power – of digital technologies (cell phones, PDAs, calculators, laptops, etc.), it is best to ban the use (or even presence) of the devices during exams.

Ideas for Future Research

Research on academic cheating must move beyond one-shot surveys that simply document the extent of the problem and its correlates. We have had several decades of such survey research and it has been extremely important in helping us to understand the extent and growth of academic cheating over the years. It is time, however, to translate these findings into concrete educational approaches designed to reduce cheating. Experimental research involving thoughtful interventions (based on what we have learned about why and under what conditions students cheat) would fill a much-needed void in the literature on academic dishonesty and would take us much closer to ameliorating the widespread problem it now constitutes. Based on the existing literature, three types of interventions seem most needed.

Beliefs about cheating. Research results from suggest that there is little consensus concerning which kind of behaviors constitutes cheating. Teachers and students do not necessarily agree on which behaviors constitute cheating nor do they share the same level of concern about the problem: specifically, students tend to count fewer behaviors as "cheating" and they tend rate cheating less seriously as their teachers. Taken together, these findings suggest that students are in need of opportunities to discuss both the meaning and morality of cheating

behavior. Such opportunities, especially if combined with efforts that promote students sense of personal responsibility for cheating, might be especially fruitful in reducing engagement in cheating behavior. The development and assessment of these kinds educational interventions would mark a real step forward in academic integrity research.

Changing peer attitudes and behaviors. Previous research (e.g., McCabe & Trevino, 1997) has shown that student perceptions of peer norms related to cheating tend to be strongest predicators of their own self-reported cheating. Whether real or perceived, peer attitudes and behaviors related to cheating tend to be strongest predictors of cheating. Consequently, intervention studies that focus on transforming peer group norms (increasing peer disapproval of and decreasing engagement in cheating behavior) may be especially helpful in reducing the problem. Previous research on attitude change (see Petty & Cacioppo, 1996, for a review) suggests such interventions would be most effective if they contained the following attributes: 1) small groups comprised of those individuals for whom the discussion is most personally relevant (in this case, students who cheat often); 2) clear and direct messages about the problem and why one should avoid doing it, and; 3) credible and attractive sources of information, such as someone who students trust and regard favorably (perhaps even a high status peer).

Academic and social-moral climates. Finally, intervention studies aimed at changing students understanding of and attitudes toward cheating – individually or in peer groups – may go some distance in reducing the problem but their effect will likely remain marginal so long as students construe the primary goal of their academic efforts to be the attainment of high grades. Cheating, after all, is a viable (and often effective) strategy if one perceives an increase in test scores to be the most salient objective. Future research is needed to clarify the connections between the academic and social-moral climates for classrooms, and their relations to student engagement in cheating behavior. Laboratory studies that manipulate environments to be more or less focused on learning (i.e., mastery oriented) and more or less pressure-filled (i.e., performance oriented) to see their impact on teacher perceptions and student cheating could offer helpful insights as to the causal mechanisms behind academic dishonesty. Regardless of causality, findings from this and previous work (Anderman et al., 1998; Jordan, 2001; Murdock et al., 2001) strongly suggest that teachers should create learning environments that help students foster an interest in learning for its own sake (i.e., mastery goals) and avoid classroom practices that encourage students to focus on test scores and social competition (i.e., performance goals). Therefore, interventions that help pre- and/or in-service teachers successfully design and implement mastery oriented classroom practices and learning communities would also be especially useful at this time.

INTERVIEWS WITH THE TEMPLETON FELLOWS

Our coverage of research findings from Templeton Fellows includes a series of interviews conducted in early 2007.
Note: Pertinent abstracts are reprinted before each set of responses.

A Comparison of Academic Dishonesty between the Humanities and Engineering Disciplines

Trevor S. Harding, Matthew J. Mayhew, Cynthia J. Finelli, Donald D. Carpenter

ABSTRACT

Engagement in academic dishonesty, or cheating, could be considered one measure of the extent to which students engage in unethical behavior. Sadly, the research literature consistently shows that engineering undergraduate students are among those most likely to cheat while in college. The present study examines the factors underlying engineering students' engagement in cheating as compared to those of humanities students, within the theoretical framework of the Theory of Planned Behavior. The study surveyed 527 randomly selected engineering and humanities undergraduate students from three academic institutions. Comparison between engineering and humanities students showed that both groups were equally likely to cheat in high school, but that engineering students were statistically more likely to cheat in college on both homework and exams. The higher rate of cheating among engineering students was correlated to the intention to cheat again in the future, a positive attitude toward cheating, less perceived moral obligation to avoid cheating, the sense that cheating was accepted among one's peers, and a tendency to have cheated in high school.

Pavela: Some faculty members will say that you're asking them to become lecturers in ethics rather than teachers in their particular disciplines. They're concerned about the time involved and a presumed lack of expertise on the subject of academic integrity.

Harding (and research team): First, rather than asking instructors to change their discipline, we are asking them to expand their view of their discipline. Practitioners of every discipline face ethical dilemmas of one sort or another. If faculty members are in fact "experts" within their disciplines, shouldn't they at least be willing to share with their students their perspectives on discipline specific ethical dilemmas that they or others have faced?

Second, we do not think it requires a great deal of expertise in ethics, if any, to discuss our perspectives with students. Simply relating stories of past experiences to students enhances their ability to recognize ethical dilemmas in the future – a key element to moral development. And it may even increase their interest in ethics and encourage them to learn on their own, or maybe even take a course in ethics. This isn't to say that faculty talking about ethics in their courses can replace a course in ethics necessarily, but for the vast majority of engineering students who never receive any formal education in ethics, it's better than nothing.

Finally, we recognize that time is always a precious commodity in the classroom. There is never enough time to accomplish the things instructors would like to accomplish, much less the added things that accreditation agencies require. However, we also believe that the real reason for engineering education is to prepare professionals for the field. If this is the case, then one could argue that spending a little less time on content and a little more time on professional issues (e.g., ethics) in every class is more in keeping with the overall goal of engineering education.

Pavela: How do you respond to the common assertion that discussing, setting, and enforcing institutional academic integrity policies isn't the faculty's responsibility?

Harding (and research team): We would agree that it is not solely the responsibility of the instructors. However, it has been repeatedly shown that academic integrity policies are most effective when the entire community (i.e., students, faculty, and administration) accepts these policies as standards of behavior and as a part of the community's culture. In our opinion, this is only possible when all members of the community discuss, establish, and enforce the institution's academic integrity policies. Collectively it means that the faculty needs to engage the students and administration in these activities. For the individual faculty member, it means discussing these policies in the classroom, establishing an understanding by which the policies will be applied in the classroom, holding students accountable to the policies, and, on occasion, participating in the administration of the policies. Students are equally responsible to engage in these discussions, to understand the policies, to hold one another accountable, and to the extent possible, participate in the administration of the policies. If all members of the community honestly and responsibly engage in the academic integrity process at their institution, it will result in more communication between faculty members, students and administrators, and will lead to a more effective and less frustrating process.

Pavela: What are the implications of your research for honor codes and other efforts to involve students in resolving academic integrity allegations and educating their peers?

Harding (and research team): Our research clearly indicates that a sense of moral obligation to avoid cheating is an important part of a student's decision-making process when tempted to cheat. Further, research on the moral development of college-aged students shows that moral reasoning and moral obligation are enhanced through opportunities to discuss and resolve ethical dilemmas alongside individuals from differing perspectives. One could argue that allowing students to participate in their institution's academic integrity system would be an excellent means of fostering this kind of growth in moral development.

A second finding from our study is that an individual's perception of the subjective (i.e. social) norms within their community also has an important effect on students' decision-making. Consequently, to the extent that a student believes her peers would be ambivalent toward or would even condone cheating, she is more likely to engage in cheating himself. Thus, when students can successfully demonstrate that they in fact do not condone cheating, it is likely to alter the perceived norms of their peers and reduce the extent to which their peers engage in cheating.

Pavela: You wrote: "[t]he classroom environment must be such that the students are empowered to learn on their own and do not see the instructor as the ultimate authority in the classroom." Isn't that

suggestion incompatible with faculty academic freedom? If faculty members aren't the ultimate authority in the classroom, who is?

Harding (and research team): We use the words "ultimate authority" here in the sense of being the authority on all information pertaining to the course topic. This does not imply that faculty cannot set the direction of the course, the learning objectives, or the pedagogical techniques used. Rather it suggests moving students from the status of a passive learner to a self-directed learner. Said another way, a major goal of every course should be to alter the environment from one in which the instructor has all the answers and the students simply absorb this knowledge to one in which the instructor is a coach or guide in the learning process and students are active participants in their own learning. Research suggests that this shift toward self-directed learning improves students' critical and evaluative thinking skills. In the end such higher level thinking will provide students with the resources they will need to recognize, evaluate, and resolve complex ethical decisions in the future.

Pavela: Does engineering attract students who are more willing to cheat --or do current teaching practices in the field somehow foster more cheating?

Harding (and research team): This question gets at what we believe is the most fundamentally important result of our research study. First, our data indicates that engineering students and humanities students (the two samples compared in this study) report cheating in high school at essentially the same rate. We cautiously extend this finding to conclude that, at least within the context of cheating in high school, engineering students and humanities students exhibit the same level of (un)ethical behavior. So we can say that engineering does not seem to attract students who are any more or less ethical than humanities students in the context of cheating. More research is needed to confirm this finding.

The second part of the question looks at why engineering students later report higher levels of cheating in college than due humanities students. Our data only hint at the possibilities, and yet it is the hint that we believe is most profound. As stated above, engineering and humanities students cheat at identical rates prior to college, so any difference in college must, it seems, be due to an environmental effect. One explanation that is frequently cited is that engineering students simply complete more tests and homework assignments giving them more opportunities to cheat. In other words, the difference is due to a problem with the method of measuring rates of cheating. However, our survey items were specifically designed to control for the number of opportunities to cheat by asking how frequently students cheat per test or per homework assignment. This leads us to believe that the higher rates of cheating among engineering students must lie in the curricula, culture or pedagogy of engineering schools. While our current data cannot confirm this hypothesis, we believe the results of this research study make a strong argument for more in-depth investigation into the role of the academic climate of engineering on students' ethical development.

Pavela: What are your plans to extend your research?

Harding (and research team): Given that this study has shown that the climate of engineering colleges is somehow related to the difference in cheating between engineering and humanities students, our research group has undertaken a new study to investigate the influence of curricular and extra-curricular experiences on the ethical development of engineering students. The study is funded by the National Science Foundation and is in

the very earliest stages of implementation. The investigators include researchers from California Polytechnic State University, Lawrence Technological University, New York University, the University of Michigan, and potentially others. At the end of the study, over 4,000 engineering undergraduates will be surveyed at more than 20 institutions distributed by geography, mission, and ethnic/racial demographics.

We hope that the results of this study will point to particular curricular experiences of engineering undergraduates (e.g. courses, modules, specialties, curricular threads, etc.) that most dramatically affect students' ethical development. Similarly, we hope to find similar effects among extra-curricular experiences (e.g. service learning, community service, etc.). With this information, we can provide more specific advice to engineering educators and administrators as to the most effective means of promoting the ethical development of engineering students. Subsequent research studies would examine these specific experiences in a longitudinal format to better understand how and why they affect ethical development. In addition, we hope to develop new experiences that could be empirically tested against current methods for ethics education.

Student perspectives on Internet plagiarism
By Dominic Sisti

ABSTRACT

Internet plagiarism continues unabated and may even be increasing. Questions pertaining to the ethical-moral construct employed by high school students to justify such plagiarism have remained relatively untouched. Understanding not simply the prevalence of Internet plagiarism but also the variety of explanations used by students to justify their plagiarism seems crucial to curtailing its practice. In this study, I surveyed 160 high school students and I endeavored to understand and describe the practices of students who use the Internet for schoolwork and who engage in copy-paste plagiarism or paper buying practices. The results indicate that students are more easily able to justify copy-paste plagiarism for a variety of reasons that mirror justifications of other forms of conventional plagiarism. Most students indicated they would never purchase a paper for reasons ranging from fear of getting caught to more principled and nuanced ethical claims.

Pavela: The Internet apparently enhances opportunities for academic dishonesty, but does it also convey any explicit or implicit message about whether academic dishonesty is acceptable or normative? Is there an Internet "culture" academics must address?

Sisti: This is a really interesting question because you are essentially asking a more general question: "does a technology carry the values of its "inventors" or users?" Or, more specifically, "is the internet value-laden such that it somehow conveys, condones, or normalizes academic dishonesty."

No, I don't think the internet itself is inherently normative- either in the typical philosophical sense of "normative" or in the social sciences sense. But its not that simple. I think the internet reflects and amplifies the *zeitgeist*, and in that way it might be considered normative. Insofar as our culture condones or is ignorant of the dimensions of academic dishonesty, then yes the internet as a technology reflects these attitudes. The open structure of the internet makes it easy for people to then act on these attitudes. But has the internet taken on a moral life of its own such that it independently conveys messages of its users? I don't think so—at least not yet.

I do not think there is a distinct internet culture. Perhaps in the early 1990's there was a small group of internet users possibly defined as a culture. But now, if there is an internet culture, then this culture includes mostly everyone. An educator who ignores the "internet culture" would be like a teacher who teaches lessons in Old English. Students will understand some of what they say but miss most. The internet has students speaking a new language built on collaboration with others, constant communication, and profound access to information. We as educators need to learn and become conversant in this new language.

Pavela: Are there ways to turn the power and reach of the Internet to our pedagogical advantage? If so, how?

Sisti: Most definitely. Leveraging the internet and online communications toward pedagogy is an imperative. Allowing students to collaborate, discuss, and communicate about course material is an easy first start. Developing Wiki sites for students to create collaborative research projects is another. Offering students the opportunity to be creative— developing websites, resources, and other online materials—is another way to use the internet for teaching. Finally, establishing an international partnership is a great way to both reinforce course material and expand students' horizons. Via discussion boards and video chats, students across the globe can talk about shared course material, develop relationships, begin to appreciate common viewpoints, and respect differences.

Pavela: We might be able to convince students at the cognitive level that academic dishonesty is socially and individually harmful, but how can this message be given any emotional or affective impact likely to change behavior?

Sisti: I should probably leave this one for my colleagues in psychology. But one thought would be to simply describe cases of people who ran into trouble because of academic dishonesty. Or to have people who got into academic trouble visit classes and discuss what they did and how it had a negative impact on their careers.

Pavela: What are the implications of your research for honor codes and other efforts to involve students in resolving academic integrity allegations and educating their peers?

Sisti: I think students participating on honor councils might want to consider new ways of detecting internet plagiarism. Internet detection software for example might be used on a case by case basis, and the results admissible as evidence. However, honor code schools— really all schools— should understand the downsides of overusing detection systems. In my opinion, the hazards include eroding the culture of trust because students feel they are assumed to be cheaters and issues involving the intellectual property of students' work, which is often assimilated into detection systems for later use.

Moral Identities, Social Anxiety, and Academic Dishonesty among American College Students
By Scott A. Wowra, Ph.D.

ABSTRACT

The present investigation examined how reports of academic cheating related to students' emphasis on their moral identities and their sensitivity to social evaluation. Seventy college students at a large southeastern university completed a battery of surveys. Symptoms of social anxiety were positively correlated with recall of academic cheating. Additionally, relative to students who placed less importance on their moral identities, students who placed more importance on their moral identities recalled significantly fewer instances of cheating. In summary, these findings suggest that students are less likely to cheat on their school work when they place greater emphasis on their moral identity and are less sensitive to social evaluation.

Pavela: Have you encountered any programs or initiatives that have been successful in moving any significant numbers of students from the "Expedient" to "Principled" groups? If so, how do those programs work? Is helping students make such a transition a reasonable goal?

Wowra: Most moral training seems to occur earlier in life, through parent-child interactions, socialization with peers, religious practice, and civic involvement. By the time students enter college, we tend to assume that they have already received enough moral education and shift focus to their professional development. Professional ethics, such as how to avoid plagiarism, often receive cursory review, if they are addressed at all. I think ignoring moral education at the post-secondary level is a mistake. By explicitly engaging college students in ethical dialogue, they will continue to grow as moral citizens. Helping students transition from expediency to principled thinking is a reasonable goal, and I believe it is one of the basic mandates of a liberal education.

Pavela: You identify collateral patterns of behavior associated with cheating. How is this information useful to classroom teachers? College administrators?

Wowra: Deceptive coping tactics, such as stealing to impress a friend or cheating on a test to avoid embarrassment, are open to cognitive-behavioral intervention. College professors and administrators should engage students in constructive dialogue regarding the motives for deception, such as greed, pride, fear, and sympathy. This activity is often referred to as "cognitive labeling." By creating a cognitive interpretation of a deceptive event, students are better able to understand the reasons they use deception to cope across social contexts. I recently presented data to high school students illustrating a positive correlation between academic dishonesty and lying to avoid embarrassment. A member of the audience confided to me later, "I never thought about that before, that lying to my friends and cheating are connected." Armed with this knowledge, teachers and administrators can guide students through a process of replacing deceptive coping strategies with honest coping strategies.

Pavela: We might be able to convince students at the cognitive level that academic dishonesty is socially and individually harmful, but how can this message be given any emotional or affective impact likely to change behavior?

Wowra: Guilt is a moral emotion tied to empathy, according to social psychologist June Tangney. We tend to feel guilty, for example, if we unjustly harm another person. A student who violates a moral prescription, such as cheating on a test, is likely to experience guilt if he or she believes that action harms others. Students often neutralize their guilt over cheating by thinking, "no one will ever find out." Professors and administrators should confront these neutralization tactics by requiring students to write essays that force them to consider the emotional consequences of their actions. Essay questions along this line include, "How would my parents feel if they found out I cheated on a test?" "How would I feel if my parents found out I cheated on a paper?"

Pavela: What are the implications of your research for the development of academic integrity programs and initiatives, like honor codes?

Wowra: A school honor code creates and reinforces a collective moral identity. That is, students who embrace an honor code perceive that they are part of a larger moral community that holds them accountable for their actions. My research focuses on how a moral identity develops and is personally experienced. We still don't know much about what a "moral identity" represents or how to measure it. My research conceptualizes the moral identity along a continuum of expedient to principled beliefs, and I have worked with other psychologists to create a survey that quantifies the moral identity into something we can measure. If we can generate a reliable and valid measure of the moral identity, we can compare colleges with an honor code against colleges without an honor code to see if these codes integrity programs make a difference in the development of students' sense of moral self.

Academic Integrity Seminar
A Student Development Resource

Academic dishonesty across the transition from high school to college.
By Ashley Mouberry-Sieman

ABSTRACT

Much of the existing research on academic dishonesty is focused on examining high school or college students' perceptions, attitudes, and behaviors at one fixed point in time. Longitudinal cohort-based research on academic dishonesty is virtually non-existent due to the fact that longitudinal research is costly, time consuming, and difficult to manage. However, despite these inherent challenges, the insight gained from longitudinal analysis is unique in that it sheds light on how student attitudes and behaviors change over time and across educational settings. This study was unique in that it examined the issue of academic dishonesty across the transition from high school to college. This study was conducted in three phases. The first phase consisted of a 21-item pre-test questionnaire, which was administered during the spring of 2004 to a cohort of 240 high school seniors attending an elite public residential high school on the eastern seaboard of the United States. Phase one yielded a response rate of 15%. Phase two consisted of an identical 21-item questionnaire, which was administered to the 36 respondents from phase one, during the fall of 2005 after they had completed one full year of college. This phase yielded a response rate of 58.8%. Phase three consisted of a small pool of 5 students who agreed to participate in individual qualitative follow-up interviews late during the fall 2005. This study found that some of the students included in this study changed their perceptions, attitudes, and behaviors related to academic dishonesty as they made transition from high school to college. Additional research in this area will serve to fill a key gap in our existing knowledge base and will increase our understanding of age appropriate strategies for addressing dishonesty and promoting integrity within all levels of our educational system.

Pavela: Beyond what you've already told us, what else do college teachers need to know about the attitudes of new students (fresh from high school) toward academic integrity?

Mouberry-Sieman: First and foremost, college teachers need to know that not all first year students arrive at college with a common understanding of what constitutes academic dishonesty. Furthermore, not all students share the same attitudes and beliefs about the value of academic integrity.

The college setting may provide some students with their first introduction to an honor code or to an official set of standards related to academic conduct. Therefore, institutions need to provide clear and detailed expectations for students about proper academic conduct early in the college experience.

Georgetown University, for example, provides a great model for how to send a clear and consistent message to all members of the academic community through the use of its "Scholarly Research and Academic Integrity" tutorial.

This tutorial not only states the rules and expectations for proper academic conduct but also shows students how to use campus resources such as those that are provided by the library. Student mastery of important concepts is

measured through a series of multiple-choice questions that are based on realistic situations that a college student may encounter.

Georgetown requires all freshmen and transfer students to complete the tutorial successfully before they are allowed to register for a second term of classes. A tutorial like this one is a great first step towards creating a shared understanding of the campus's commitment to academic integrity.

Teachers should also know that, in general, most college students want to be honest in their academic work. Most academic cheating occurs during a point of desperation. College students, in general, and first year students, in particular, feel so much pressure to succeed that they can easily become overwhelmed and tempted to engage in behaviors that they know are wrong. As educators we should not only work to educate our students about our policies and expectations but we should also work to help students develop essential skills (i.e., time management, critical thinking, etc…) that will help them to avoid going down the path towards desperation. The sooner we acknowledge warning signs (i.e., absences from class, improper citation in drafts, late assignments, etc…) the sooner we can steer students back on the right track toward success.

Educators should also work to help develop student confidence in their ability to produce quality and meaningful academic work. Many of the first year students I've talked with have expressed feeling paranoid or fearful during that first semester of school. They are constantly reminded of the academic integrity policies and the severe consequences associated with breaking the policies. As a result, in their attempt to comply with the expectations put forth, they go to an extreme and over use citations in their work. While I agree that setting clear expectations is important, I do not advocate for motivating students by fear. While this may be the only approach that works for some students I do not think that it is an effective approach for the majority of them, especially if student learning is the goal that we are trying to achieve. We need to make it more understandable for students, especially first year students, to fail or to make a mistake. I think that the way that assignments are structured and evaluated can have a large impact on how students perceive success. For example, a professor could ask students to submit un-graded drafts of papers or un-graded problem sets for feedback (by teachers or peers) prior to submitting an assignment that will be counted towards the final grade.

Teachers must also take into consideration that first year college students are typically developmentally different from upperclassmen. Research on moral reasoning among college students has generally found that moral reasoning abilities are positively correlated with school classification (i.e., students at higher grade levels have higher levels of moral reasoning than students at lower grade levels). Therefore, instructors should work to provide students with developmentally appropriate challenges. Teachers should take every opportunity to engage students in discussions about the implications of academic dishonesty and challenge students to think critically about how dishonest behaviors by one person or a group of people can negatively impact others.

Finally, research has shown that students may not think that academic dishonesty in non-major courses is as serious of an issue as it is in major courses. Most first year student course loads consist of general college/non-major courses. Knowing this, teachers of first year students should work to address the importance of academic integrity in all courses. The teachers should also work to help student realize how the learning in a general college/non-major courses is applicable to other areas of coursework and life.

Pavela: Are students who fall into the habit of cheating in high school destined to repeat that pattern in college?

Mouberry-Sieman: While research has shown that prior academic misconduct is a strong predictor of future academic misconduct (Whitley, 2002), I do not believe that students who cheat in high school are necessarily destined to repeat the same pattern in college. Old habits may be hard to break but they can be broken.

Many students will argue that cheating is simply a crime of opportunity. Students who cheated in high school may not cheat in college if the opportunity to do so is not available. Therefore, college teachers should work to remove obvious opportunities for students to engage in dishonest behaviors.

Another factor that comes into play here is social norms. Research suggests that a major predictor of academic dishonesty is students' perceptions of social norms that support dishonest behaviors (Whitley, 2002). During the transition from high school to college there is a great opportunity to introduce students to a new set of standards and social norms. Messages about the norms of the campus community can be sent in a variety of ways. Many institutions choose to send a copy of the honor code and community standards to the students along with their admission materials, while others choose to introduce the honor code or integrity policies during orientation or at convocation. Whatever the method of communication, students do not only need to hear from administrators, they also need to hear from students. Students may have cheated in high school because cheating was an accepted behavior in their peer group. In college, students often form new peer groups. If students immediately get the message from their peers that academic dishonesty is not acceptable in college it is likely that this will have a positive impact on their behavior.

Pavela: How can we expect honor codes to take root if students think teachers are mainly responsible for promoting academic integrity?

Mouberry-Sieman: Teachers do have a major responsibility for promoting academic integrity. Teachers need to lead students by example. Teachers not only need to communicate expectations clearly they need to make academic integrity an integral part of class discussion. Teachers cannot simply include the honor code on a syllabus and hope that students get the message. Students need to see and understand that teachers take the honor code and academic integrity seriously. If students perceive that teachers do not take it seriously (i.e., by not holding students accountable or by structuring exams poorly) then students have no incentive to take it seriously themselves. For an honor code to truly take root it needs to be supported by the entire campus - teachers, students, and administrators.

Institutions should also educate students about their role in promoting academic integrity. Students have a responsibility to not only act with integrity themselves but to promote integrity among their peers. The biggest obstacle for students is peer accountability. It is extremely difficult for a student to confront a peer about inappropriate behavior. It simply goes against the peer culture and norms. As educators we need to help students understand why integrity is a value worth standing up for, even if it requires confronting a peer's negative behavior. We need to help students understand the importance of peer accountability and help them develop the skills necessary to engage in difficult conversations with one another.

Pavela: We might be able to convince students at the cognitive level that academic dishonesty is socially and individually harmful, but how can this message be given any emotional or affective impact likely to change behavior?

Mouberry-Sieman To answer this question I will again refer to a program that is being implemented by Georgetown University. As part of their judicial process, Georgetown students who are found responsible for academic dishonesty are given the opportunity to participate in a sanction reduction program. Last spring, I had the opportunity to hear a student speak who was participating in this program. One of the steps in her sanction reduction program was to publicly accept responsibility for her actions and to discuss with her peers the consequences of her past behavior and the resulting lessons learned. The student talked about the circumstances surrounding her decision to engage in an academically dishonest behavior, the experience of going in front of the judicial board, and the immediate and personal impact that being found responsible for engaging in academic dishonesty had on her life. She not only had her diploma withheld, she also lost a fellowship that she had been awarded and she had a job offer that she had already accepted rescinded. Hearing a student talk about the real consequences she felt as a result of her decision to engage in dishonest behaviors was very powerful. I believe that if more students were given the opportunity, perhaps during orientation or a first year seminar, to hear from a peer about the real consequences of academic dishonesty they would certainly think twice before engaging in dishonest behaviors.

I also think teachers should engage students in conversations about how academic dishonesty in college translates to dishonest behavior in the professional world. This is something that is not done often enough. By providing real examples of situations where people have been harmed (i.e., loss of jobs, loss of life, loss of reputation, etc…) because of an employee's decision not to act with integrity teachers will help students understand the importance of integrity in all aspects of life.

Pavela: Students often weigh the perceived costs and benefits of cheating or plagiarism. How can that "weighing" process be used to promote academic integrity?

Mouberry-Sieman: Educators need to work to help students broaden how they define costs and benefits. Students often fail to recognize the costs associated with the loss of personal integrity. Students also fail to consider the costs associated with the negative social impact of academic misconduct. At the same time, students do not give appropriate weight to the value of honest work. Adding these factors into the equation will help to tip the scales in this decision making model towards acting with integrity, even when the risk of getting caught is close to zero (i.e., homework assignments, unproctored exams, etc....). In the end, we want our students to make the decision to act with integrity even when no one else is looking.

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Academic Integrity Seminar
A Student Development Resource

Missing Links in Academic Integrity: Educational Implications and Future Directions
By Jason M. Stephens, Ph.D.

ABSTRACT

The present study provides a comparative analysis of students' beliefs and behaviors related to six analogous pairs of conventional and digital forms of academic cheating. Results from an online survey of undergraduates at two universities (N=1,305) suggest that students use conventional means more often than digital means to copy homework, collaborate when it is not permitted, and copy from others during an exam. However, engagement in digital plagiarism (cutting and pasting from the Internet) has surpassed conventional plagiarism. Students also reported using digital "cheat sheets" (i.e. notes stored in a digital device) to cheat on tests more often than conventional "cheat sheets." Overall, 32% of students reported no cheating of any kind, 18.2% reported using only conventional methods, 4.2% reported using only digital methods, and 45.6% reported using both conventional and digital methods to cheat. "Digital only" cheaters were less likely than "conventional only" cheaters to report assignment cheating, but the former was more likely than the latter to report engagement in plagiarism. Students who cheated both conventionally and digitally were significantly different from the other three groups in terms of their self-reported engagement in all three types of cheating behavior. Students in this "both" group also had the lowest sense of moral responsibility to refrain from cheating and the greatest tendency to neutralize that responsibility. The scientific and educational implications of these findings are discussed in this study.

Pavela: The Internet apparently enhances opportunities for academic dishonesty, but does it also convey any explicit or implicit message about whether academic dishonesty is acceptable or normative? Is there an Internet "culture" academics must address? If so, how?

Stephens: The Internet, and digital technologies more generally, have created faster, more effective, and, in some cases, novel tools for students seeking to plagiarize or cheat in some manner. These tools, of course, do not cause academic dishonesty but they do greatly facilitate its commission. I don't think this conveys any direct message about the acceptability or morality of academic dishonesty. However, the fact that the Internet and other digital technologies (cameral phones, graphic calculators, and other PDAs) greatly expedite the execution many forms of dishonesty, especially plagiarism, may affect students' moral perception, judgment and behavior. For example, many students do not attribute the same authorial or copywrite status to Web sites and resources as they do printed books and journals. This may then obscure students' judgment about the acceptability of using this material without proper attribution. To some extent this is part of the Internet "culture" that academics must address. Although the Internet has "grown up" considerably over the past fifteen years and with it the level of discourse about "intellectual property" and "proper use," there are still many people who view the Internet (or, more precisely, all the content on the Internet) as "free"; free, that is, of intellectual ownership and copyright protection. This is the kind of attitude that faculty need to address; they must help students understand that Internet has become a legitimate, even indispensable, tool in teaching and scholarship. They must also give students the "tools" – such as effective search techniques/engines (like Google Scholar) and proper citation procedures – for using the Internet.

Pavela: Are there ways to turn the power and reach of the Internet to our pedagogical advantage? If so, how?

Stephens: I think this already happening. Companies like Google, who have created Google Scholar, are making the Internet an easier and more effective academic tool. WebCT, Vista, Blackboard, etc. are also contributing to the revolution in online teaching and learning. With respect to combating the downside of the Internet (i.e., cut-and-paste plagiarism), programs like Turnitin.com are making detection of dishonesty quite simple.

Pavela: We might be able to convince students at the cognitive level that academic dishonesty is socially and individually harmful, but how can this message be given any emotional or affective impact likely to change behavior?

Stephens: The supposition in your question – that affect is more important than cognition in determining behavior – has been supported by numerous studies. With respect to academic dishonesty, many students believe that cheating is wrong but report doing it anyway. Part of this disconnect between the (cognitive) judgment that "cheating is wrong" and the enactment of the behavior is explained by the fact that students no longer feel guilty about cheating. What happened to the guilt? Well, there are a number of explanations that involve both cognitive and affective processes (it is, in reality, very difficult to disentangle thoughts and feelings). First and foremost, students get habituated to cheating and doing so become de-sensitized to it. I have had many students tell me (in individual interviews and focus groups) that they felt guilty when the first started cheating (often in middle school) but no longer do. Over time, with repeated cheating, these students develop a vast repertoire of "neutralizing" techniques. Neutralization is essentially another name for rationalization. Psychologically speaking, the primary function of neutralization or rationalization is to neutralize (displace, minimize or negate altogether) any sense of personal responsibility (and ultimately guilt) that one might feel for violating societal conventions or moral principles. Research indicates that the most common technique that students employ is displacement of responsibility; they blame their teachers for their cheating (usually with charges of poor instruction or unfair assignments/assessments). Cheating is also neutralized or rationalized through diffusion of responsibility; students say everyone else is doing it and that schooling (the quest for high grades and college or graduate school admissions) has become a "cheat or be cheated" game. It's important to note here, that these neutralizing techniques are not completely baseless rationalizations. Poor instruction, unfair tests, the fierce competition for grades, and widespread cheating are features of today's educational landscape. The question you ask is how can educators, in the face of this reality, engender (or revive) in students a strong sense of personal responsibility for refraining from cheating. The single best approach is through the development and implementation of institutional honor codes and councils. When done well, these create a community of learners that understand, value and respect academic integrity. They also provide a fair, clear and often student-governed process for addressing academic dishonesty when it does occur.

Pavela: What are the implications of your research for honor codes and other efforts to involve students in resolving academic integrity allegations and educating their peers?

Stephens: Much of my own research has focused on the thought-action problem described above. And, as alluded to above, I think the best way close the gap between students' beliefs and behaviors related to cheating is to create a community of learners that understands, values and respects academic integrity. The biggest challenge we face in ameliorating cheating is not students' belief that it is right but rather their tendency to neutralize any personal responsibility for doing so. Honor codes and related efforts are effective because they clearly communicate what constitutes cheating, that it is wrong to do, and that students are personal responsible (and "on their honor" at institutions with traditional honor codes) to refrain from cheating. At some institutions, students are not only responsible for their regulating their own cheating but also that of their peers; that is, they must confront (though not necessarily report) students whom they suspect of or have seen cheating. I should point out here that it doesn't necessarily take the creation of a formal honor code to change the culture of an institution so that embodies and reflects a shared valuing of and commitment to academic integrity. What is necessary is a gathering of the whole community, with all stakeholders (students, faculty, and administrators) having a voice and investment in the process. Students need to play a central role in creating, implementing, and governing any policies and procedures related to the promotion of academic integrity and the sanctioning of its violation. This includes educational or inculcation efforts designed to bring newly matriculated into the fold.

Pavela: To what extent does the broader American culture promote academic dishonesty?

Stephens: Many scholars and commentators have lamented the changes in social and moral values (e.g., increases in individualism and materialism accompanied by decreases in social commitment and political participation) that have occurred over the past several decades. The most comprehensive barometer of these shifts among adolescents comes from the nearly 40 year old Cooperative Institutional Resource Program conducted by Alexander Astin and his colleagues at UCLA. Their research indicates that the vast majority of today's students entering college are oriented toward becoming "very well off financially" (approximately 80% say this is a "very important" or "essential" goal) while only a minority are seeking to "develop a meaningful philosophy of life" (approximately 35% say this is a "very important" or "essential" goal). This pattern is almost a perfect mirror image of the goals of entering Freshmen in late 1960s, when the majority regarded higher education as a journey of personal, intellectual and moral growth and not merely a means to social status and material wealth. These shifts are important because goals and values serve to motivate (direct and energize) behavior, and there is little doubt that growth of academic cheating over the past four decades can be at least partially attributed to this broader shift away from developing "meaning" and toward acquiring wealth. Cheating, after all, is a viable strategy for students who are primarily interested in the extrinsic goals or rewards (e.g., grades, degrees, money, status, etc.) associated with academic success. Conversely, cheating makes little sense for students who are primarily interested in developing their understanding or mastering new skills. Extrinsic and intrinsic goals are not mutually exclusive and many students value and pursue both simultaneously. These distinct goals, however, can conflict and produce dilemmas. As noted above, many students believe that cheating is wrong but make a conscious choice to do it anyway in order meet the pressures to keep up or get ahead. For many students today, getting an A is more important than morality. Their intrinsic understanding and acknowledgment that cheating is wrong is trumped by their pursuit of A's and the extrinsic rewards associated with academic "success." This value orientation or ordering, and the widespread problem of academic cheating associated with it, is not simply a product of "bad" students who don't know right from wrong. There are broader social and cultural forces at play that affect the behavior of both adolescents and adults in our society. From the real-life trials of Martha Stewart, Andrew Fastow, and Ken Lay to the televised

tribulations of popular reality shows such as Joe Millionaire (a man who masquerades as a multi-millionaire in hopes of marrying a fetching young woman who, it seems, wouldn't otherwise have him), we live in a culture where lying, stealing, and deceiving have become the commonplace means that our icons of success use to advance their personal wealth and power. The message to our children and adolescents seems clear: material success comes before moral integrity; doing well is more important than doing good. This disconcerting message – its evolution and affect on the norms and practices of broad range of sectors in our society (education, business, politics, etc.) – is well-described in David Callahan's recent best seller, The cheating culture: Why more Americans are doing wrong to get ahead. As Callahan's work reveals (and daily news releases remind us), cheating is not a problem that is confined to nor created by adolescents. It is a complex sociological and psychological problem that seems to pervade nearly every aspect of our society. With this in mind, academic cheating among students at all levels is best understood as a reflection and not determinant of societal trends and cultural values. Accordingly, schools alone cannot remedy the problem. They can and must, however, act to ameliorate it.