

AC 2009-540: ACADEMIC INTEGRITY AT AN AMERICAN-STYLE UNIVERSITY ABROAD: STUDENT ATTITUDES, AWARENESS, AND CHEATING FREQUENCY

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Academic Integrity at an American-style University Abroad: Student Attitudes, Awareness, and Cheating Frequency

Abstract

As US universities open branch campuses across the world, and as the number of independent American-style institutions outside of North America increases, attention is turning to the issue of how to deliver a genuinely American education to non-American students, outside of America, with predominately non-American faculty and staff. Among the challenging quality-control issues that are faced is how to apply the same Academic Integrity expectations as are generally associated with the American higher education model, and how to enforce related regulations in an efficient manner.

In this research, a survey was administered to approximately 400 undergraduate engineering students enrolled at an American-style university in the Middle East gulf region. Students were surveyed to assess their attitudes about which activities constitute academic dishonesty, the frequency with which they engage in these activities, their motivation for cheating, and the penalties that students typically face when caught cheating. Statistical methods were utilized to investigate variation in attitudes and behavior among various student sub-groups, such as by gender, nationality, English language proficiency, and academic standing. Results indicate that approximately three-fourths of students engage in some activity that would generally be classified as academic dishonesty, but many of these students believe that these activities (such as copying other students' homework assignments) are not classified as cheating and do not have a harmful effect on their education.

Introduction

The number of American-style universities outside of North America is increasing, spurred by the twin perceptions that (1) American education is a pathway to career success, and (2) in the post-9/11 world, gaining admittance to America is increasingly difficult. As branch campuses of established American universities open abroad, and as new international institutions obtain accreditation from US-based agencies, it is important to examine how to provide an "American" education when an institution is surrounded by a foreign culture, populated by non-American students, and largely staffed by educators with limited academic experience in the United States.

Academic honesty norms are among the differences that may arise between a foreign academic culture and American academic culture; definitions about what constitutes plagiarism, typical penalties against students who are caught cheating, motivations for engaging in dishonest behavior, and the perceived faculty role in enforcing expectations are some of the areas where what is considered typical at an American institution in North America may be different from perceptions and practices at an American-style institution abroad. Since academic dishonesty among students undercuts the educational experience, it is important for administrators and instructors to have a clear idea of the magnitude of the problem of academic dishonesty, and identify existing trends that may have an impact upon which strategies can be utilized to educate

students, prevent incidents of academic dishonesty, and appropriately respond when such incidents are discovered.

Within the United States, there is evidence that while the percentage of students who cheat while in college has remained relatively constant over time (i.e., 82% in 1963 versus 84% in 1993), the severity of cheating (e.g., the frequency of cheating among those who cheat, and the types of academic dishonesty engaged in) has increased over time (e.g., students who admit to having cheated in an exam increased from 26% in 1963 to 52% in 1993, and the percentage of students who engaged in inappropriate collaboration with other students on homework assignments increased from 11% to 49%) [1]. Several studies [2, 3] have identified variations in rates of cheating among students within different majors, with general agreement among these studies that higher percentages of business and engineering students engage in cheating (91% and 82%, respectively) compared to students in the social and natural sciences (73 and 71%, respectively)[2]. Likewise, past research has identified variations in rate of cheating among university students from different countries and between genders, with statistically significant differences between students from Japan, the United States, the United Kingdom, and South Africa [4].

The purpose of this study is to identify differences in cheating behavior and attitudes between engineering students at an American style university in the Middle East and students in the United States, and provide information about the circumstances that may relate to these differences.

Methods

In this study, approximately 400 engineering students - including freshman ($n = 15$), sophomores ($n = 134$), juniors ($n = 97$), and seniors ($n = 157$) - at an American university in the Middle East gulf region were surveyed with respect to what types of academic behavior they consider dishonest, how often they engage in various forms of cheating, their motivations for cheating, their awareness of academic integrity regulations, and typical penalties faced when cheating is detected. The survey method utilized was an online, anonymous questionnaire, administered to students during regularly scheduled class time. No personally-identifiable information about students was gathered. The survey was administered in English, and the survey questions are included in the Appendix.

Since the results and conclusion of this study are based on self-reported data, it is important to note that actual student behavior may differ from that which was reported in the survey. Considering the negative implications associated with cheating, it is thought that any difference between self-reported behavior and actual behavior would be reflected in actual rates of student dishonesty being greater than reported.

Analyses of variance (ANOVA), including post-hoc pairwise comparisons and two-way cross-tabulation (Chi squared analysis), were utilized to determine whether differences in behavior and attitudes among student population sub-groups (e.g., male vs. female, differences between different majors, high GPA students vs. low GPA students, etc.) were statistically significant at $\alpha=.05$.

Results and Discussion

Survey results were analyzed relative to: (1) quantifying the amount of academic dishonesty that occurs among engineering students at the university where surveying was conducted; (2) understanding the attitudes of students concerning academic integrity issues and motives for those who cheat; (3) describing the student perception of faculty efforts to prevent cheating and the response to cheating when it is uncovered, and (4) student awareness of expectations and regulations pertaining to academic integrity.

74% of the engineering students surveyed in this study admitted to cheating on homework assignments at some point in their university career, with 54% admitting to cheating on lab reports, and 30% on quizzes / exams. Statistically significant variations in the amount of cheating were found for students depending on their major within engineering (see Table 1), a potential reflection of varying expectations and practices between different academic departments (e.g., relatively more policing of homework assignments for copying in one major than another).

Females reported significantly lower levels of academic dishonesty than males in all types of academic work and within each major. Students with TOEFL scores below 550 reported a significantly higher rate of copying homework assignments and lab reports than students with TOEFL scores above 550.

One trend identified among students is an increasing rate of homework copying as students move through their academic career: sophomores copy more than freshman, juniors more than sophomores, and so on. This trend may indicate that academic dishonesty is partly an institutionally-reinforced phenomenon, where ineffective cheating detection and an unwillingness to address academic honesty issues alters student standards and behavior over time.

Students reported broad discrepancies among faculty members in the typical punishments that are assigned when cheating is detected, perhaps further reinforcing student attitudes that academic honesty is unimportant and that firm standards do not exist.

I. Amount of Academic Dishonesty

Four questions were used to understand the amount of homework copying, lab report copying, homework solution abuse, cheating on quizzes / exams, and overall student impression on the level of cheating in classes. In order to understand which students self-report behavior contrary to the academic integrity regulations stipulated in the undergraduate catalog, the student responses for each question were analyzed relative to major, gender, class, age, GPA, TOEFL score, Intensive English Program (IEP) attendance, course load, and whether the student lives in the dorms. Quantifying the amount of academic dishonesty among students was approached in two different ways: through investigation of how often students engage in different types of behavior (i.e., cheating frequency), and in quantifying the percentage of students who report engaging in these same behaviors.

Engineering students at the Middle Eastern American-style university where surveying was conducted reported, on average, engaging in homework copying on 23.4% of all assignments (S.D. = 26.3), 18.3% of all lab reports (S.D. = 27.0), and 7.4% of quizzes and exams (S.D. 18.4). The wide standard deviation values indicated the fact that many students report never cheating on any type of academic work, whereas other students frequently engage in these activities. When analyzing student-reported rates of cheating by major, it was observed that statistically significant variations in cheating rate were present between different majors. Females reported significantly lower levels of academic dishonesty than male students in all types of academic work surveyed. While students with GPA > 3 are less likely to copy homework assignments, they are more likely to copy lab reports than their peers with lower GPAs. Students with TOEFL < 550 are more likely than other students to copy homework and lab reports, but have the lowest self-reported rate of cheating in exams. No statistically significant difference in academic dishonesty was observed between students who attended an intensive English language training program prior to beginning their undergraduate engineering studies and those who did not. Likewise, significant differences in cheating behavior do not exist between students with 16+ credit hours compared to students with course load < 16 credit hours, nor did residing in on-campus dorms yield significant differences in academic dishonesty.

With respect to the overall percentage of students who report sometimes engage in academic dishonesty, Table 1 shows the percent of students indicating that they sometimes engage in cheating activities. The percentages presented in Table 1 are higher than the student-reported *frequency* of cheating in any particular area because any student who indicated that they copy homework, lab reports, or cheat in exams/quizzes more than 0% of the time has been designated as “sometimes” cheating for purposes of illustration in Table 1.

Table 1 – Percent of students indicating that they sometimes copy homework, copy lab reports, and cheat in exams/quizzes.

Major	HW	Lab	Exam/Quiz
All	73.7	54.5	29.9
CIVIL	69.1	51.1	45.2
MECHANICAL	78.1	56.2	37.5
CHEMICAL	75.4	34.4	19.7
COMPUTER SCI.	76.9	51.3	30.0
ELECTRICAL	72.4	73.2	31.6
COMPUTER ENG.	78.8	73.5	15.2

Gender			
Male	74.6	56.9	37.9
Female	71	47.0	22.0

Ac Status			
Fresh	73.3	37.5	25
Soph	67.2	51.5	41.4
Junior	79.4	58.8	32.3
Senior	75.8	56.1	29.3

In comparison to college students in the United States, a greater number of students at a Middle Eastern American University admit to copying homework assignments; 74% of engineering students in this study indicate sometimes copying homework assignments, compared to 49% of university students surveyed at 99 universities in the United States [2]. In contrast to elevated rates of homework copying, Middle Eastern American University students reported relatively lower rates of cheating in exams, with 30% of Middle Eastern students reporting exam cheating compared to 52% of students from American universities [2]. In comparing these figures, however, it is important to note two things: (1) that the number of students who admit to cheating on a survey may not be the same as the number of students who actually cheat, and (2) that the percentage of students who admit to cheating is not the same as the frequency or regularity of student cheating. In other words, some students who admit to cheating may have only cheated one time, while other students who admit to cheating do it often.

II. Student Attitudes Towards Academic Integrity

In order to probe the attitudes towards students related to the cheating they do engage in (and possible reasoning when they observe academic integrity regulations), several questions were asked related to which activities are considered cheating, their educational impact, and who might be to blame when such activities occur. Results are shown in Table 2.

Table 2 – Student responses to questions seeking to gauge student attitudes towards cheating. (In each case, higher numbers are “worse” – questions identify students with the “wrong” attitudes about cheating).

Major	HW Copy is not Cheating	HW Copy HELPS Learning or has no effect	Did not identify all plag	Copying, complicity, or both in exam is NOT cheating	Student cheating is partly instructor's fault for too much work
All	41.9	52.9	76.9	55.6	60
CIVIL	35.7	55	82.4	57.9	59.3
MECHANICAL	52.7	54.1	82.5	63.5	70.3
CHEMICAL	41.9	50	65.6	45.2	48.4
COMPUTER SCI.	42.5	50	62.5	37.5	57.5
ELECTRICAL	36.8	49.1	72.9	50.9	61.4
COMPUTER ENG.	51.4	57.1	83.3	87.1	62.9
Gender					
Male	44	54.7	77.8	57	60.9
Female	35.6	47.5	73.8	51.5	57.4
Ac Status					
Fresh	56.3	56.3	82.4	68.7	56.3
Soph	33.8	51.5	82.1	54.4	54.4
Junior	46.5	50.5	70.9	55.5	55.4
Senior	44.5	55.5	75.6	55.5	68.4

Several trends identified from the responses summarized in Table 2 include:

- Many students (41.9% of engineering students overall) do not consider it cheating to copy homework assignments (note: this activity is defined as cheating by the Academic Integrity section of the undergraduate catalog). In comparison, when asked a similar question, only 14% of engineering students at a university in the United States indicated that copying homework assignments is not cheating [5].
- Students with lower GPAs are more likely than students with high GPAs to believe that copying homework assignments is not cheating.
- The majority of students (52.9% overall) do not believe that copying homework assignments has a negative impact on academic performance.
- The majority of students (76.9% overall) did not identify all of the listed activities (directly copying of words, copying others' ideas, using others' images) as plagiarism (note: all of these activities are specifically included in the undergraduate catalog explanation of plagiarism)
- While 44.5% of students believe that both students are guilty of cheating in an exam where one student provides answers to another student, 42% believe that the person providing the answers is not engaging in cheating, and 11.9% of students believe that neither student is engaging in cheating. Overall, 56% of students polled answered that some form of disallowed sharing during an exam should not be classified as cheating. In contrast, only 2% of American students polled said that looking at another student's test during an exam is not cheating, and only 8% believe that passing answers to another student is not cheating [5].
- 60% of students (overall) believe that instructors should share some of the fault (for 'assigning too much work') when students cheat.
- Male students have uniformly more favorable attitudes towards cheating than female students. Additionally, these favorable attitudes towards cheating were manifest in higher self-reported rates of cheating among male students than female students (see Table 1). Among American university students, the trend of more favorable attitudes towards cheating among males is also present [4].

Within the survey, students were asked to identify which reasons motivate them to engage in academic dishonesty. Among the reasons provided, 'time pressure' was the top choice, with 48.6% of students identifying it as the factor that most often leads to cheating for them. The second-most popular response was 'excessive difficulty of the material', with 22.3% of students selecting this answer, and the third-most popular response was 'I never cheat', which was chosen by 19.3% of students. For American students, those at the highest risk of cheating include those with deficient study skills, those students who are lower in industriousness, those who are higher in procrastination, and those with greater test anxiety [6]. Among engineering students in the Middle East who are likely to cheat, many of the same risk factors are shared, along with some

reasons for cheating that have more to do with opportunity than inherent student shortcomings, such as having published solution manuals and professors who do not actively assess student work for freedom from cheating.

III. Student Perception About Cheating Prevention and Punishment

Several survey questions were asked to gauge student attitudes about how serious their professors are at trying to prevent cheating, the range of punishments employed when cheating is discovered, and the student response to these cheating prevention and punishment measures. A summary of student responses is provided in Table 3.

Table 3 – Student perception of efforts to prevent cheating and reaction to being punished for academic dishonesty. (Note: in each case, higher numbers may be thought of as indicating attitudes or activities that may increase the frequency of student academic dishonesty.)

Major	Professors do NOT try to find out if HW copied	Solution manual is available BEFORE assignment is due	Prof post HW online after HW due	If punished, will lower teaching evaluation
All	26.5	22.5	83.8	53.7
CIVIL	18.6	23.2	87.9	52.9
MECHANICAL	44.6	33.8	87.8	55.4
CHEMICAL	22.6	20.3	96.8	59.7
COMPUTER SCI.	15.0	6.2	70.0	50.0
ELECTRICAL	31.6	23.0	80.7	63.2
COMPUTER ENG.	31.4	16.9	57.1	42.9
Gender				
Male	26.7	23.5	82.7	52.4
Female	25.7	19.2	87.1	57.4
Ac Status				
Fresh	43.8	15	87.5	81.3
Soph	14.7	21.4	86.8	62.5
Junior	25.7	15.6	84.2	52.5
Senior	35.5	28.7	80.6	43.9

The students of different majors within engineering have widely-varying perceptions about whether the professors in their major make an effort to determine whether homework assignments are copied. For example, whereas only 15.0% of computer science students say that their professors do not try to find out if homework assignments have been copied, 44.6% of mechanical engineering students believe that their professors do not try to determine whether homework assignments have been copied. Student attitudes about the acceptability of academic dishonesty may be influenced by their perception of how faculty view such behavior; for example, students in mechanical engineering (where 44.6% say that their professors do not try to find out if homework assignments are copied), also have the highest rate among the students polled for believing that copying homework is not considered cheating (52.7%), have the highest rate of belief that copying homework does not have a negative impact on academic performance (54.1%), the highest rate of reporting that copying and/or providing answers in an exam is not

cheating (63.5%), and the highest rate of faulting instructors as party to blame when students choose to cheat (70.3%).

One trend uncovered by questions summarized in Table 3 is the ubiquity of homework solution manuals. Overall, 22.5% of students state that homework solution manuals (e.g., downloaded from the internet, or collected from students who gathered them from professors' online postings during a previous semester) are available before the homework assignment is due. This means that some students have access to official solutions when creating their homework assignments, and the effect of this is magnified when considering the 73.7% of students who state that they sometimes engage in homework copying; if a pre-available homework solution is the original source of a homework assignment being copied, then the learning process associated with independently completing a homework assignment is co-opted many times over.

With 83.8% of students stating that, in general, their professors post homework solutions online (e.g., as a .pdf file) after the assignment due date, it should come as no surprise that these solutions are gathered by students over time and passed down from one semester to the next. Besides the fact that many textbook authors specifically request that homework solutions not be made available to students, and besides the fact that these homework solutions are typically copyrighted (thus making it illegal to reproduce and distribute electronically), there are clear correlations between departments where pre-available homework solutions are most available and student engagement in acts of academic dishonesty.

One disconcerting student attitude towards academic integrity is associated with a question that states, "If you are punished for cheating in a course, would that lower the evaluation score you assign at the end of the semester?" 55.2% of students answered 'yes' to this question.

In understanding the significance of this response, it is first important to distinguish what the question is not asking: the question is not asking whether the students would give a lower teaching evaluation if the punishment was *excessive*, the question is not asking whether the students would give a lower evaluation score if the students had been *wrongfully accused* of cheating, the question is not asking about punishment related to activities that the student may *not consider as cheating* – the question specifically says "cheating" without, in the question, defining for the students what is meant by cheating, thus leaving the student to judge for themselves what cheating is. Instead, what the question does ask students is if they were cheating in a course and received some form of punishment, would they lower the evaluation score the student assigned at the end of the semester. That a majority of students say yes, they will lower teaching evaluations when caught cheating, highlights a potentially harmful interaction between student attitudes towards cheating and faculty response to cheating, relative to the perceived need to receive satisfactory teaching evaluations.

This statistic of 55.2% of students stating that they would lower teaching evaluation scores if punished for cheating – combined with the heavy emphasis often placed on teaching evaluation student statistics during faculty annual evaluations and promotion consideration – means that faculty have a dis-incentive to proactively enforce academic integrity among students. According to this statistic, faculty who enforce academic integrity regulations among students are at a disadvantage to those who do not when 'teaching ability' is being judged by student

evaluation numbers. While it is possible that faculty who stridently enforce academic honesty rules could win the respect of some honest students, in view of the favorable attitudes of the majority of students towards cheating highlighted in Table 2, the net effect is likely to be negative for faculty who actively discourage cheating, punish students who cheat, and enforce academic honesty rules.

A variety of possible reasons have been previously identified for why some faculty members are relatively less vigorous in enforcing academic honesty regulations and why they do not do more to stop students who cheat. Some of these reasons include [7]:

- The propensity of university administrators to overturn findings of cheating and related punishments
- The lack of time among faculty members to investigate suspected incidents of cheating
- The feeling among some faculty that policing cheating is not part of their job description
- Fear of being blamed for their students' ethical violations
- Harassment by students who have been reported for cheating
- Fear of lawsuits from students alleged to have cheated
- Concern that enforcing academic integrity regulations will make faculty, and enrollment in the courses they teach, less popular among students

All of these concerns also apply to faculty members at American universities abroad, along with powerful financial incentives not to question the status quo, identify problem areas, or otherwise “rock the boat” (salaries for faculty members at American style universities in the Middle East are often higher than salaries for comparable positions in the United States, along with other benefits such as free housing, free utilities, encashable retirement and educational allowances, and exemption from income taxes in the US and the country in which they are working).

Although many aspects of the American education system and structure have been implemented in American-style universities in the Middle East, one attribute of the American system that is not typically present at American-style universities abroad is the process and institution of faculty tenure. Rather than the highly stable employment status and associated academic freedom enjoyed by tenured faculty members in the United States, faculty members in many American-style universities abroad instead are employed in renewable contracts with a fixed term. As such, these faculty members are never truly free from the need to keep students “happy”, having an elevated interest in receiving favorable course feedback from students so that contract renewal is assured. In the experience of the author, some engineering faculty members at American-style universities in the Middle East, aware that the majority of students would “punish” them in student evaluations for enforcing academic integrity regulations (see Table 3), do not actively look to discover incidents of cheating, assign minimal penalties when such incidents arise, or in some cases turn a blind eye to the issue altogether.

Among the factors that inhibit student cheating, only “sanctions” (and not “embarrassment” or “shame”) are likely to be successfully implemented by faculty members in having an impact in shaping student behavior[8]. As such, to deter against student cheating, it is important that students perceive both a high likelihood of being caught if they engage in cheating, and perceive that the likely penalty for cheating will be substantial. In short, the risk of getting caught, and

the penalty assigned when getting caught, should outweigh in the students' minds the benefit associated with cheating. When asked what the typical penalty when a student is caught copying a homework assignment, students responded as shown in Figure 1 below. The most commonly-cited penalty (57.5%) was a grade of zero for the homework assignment that had been copied. When combined this with students responses that “nothing” would happen, that they would be giving “a warning”, or merely receive a “reduced” grade on the assignment in question, 77.6% of students cited penalties for copying homework that are so light that there is, essentially, no deterrent against homework copying; for a student who was not going to submit a homework assignment anyway (i.e., receive a grade of zero), the threat of a grade of zero – or some lighter penalty such as a warning – if they are caught copying is unlikely to deter them from the attempt.

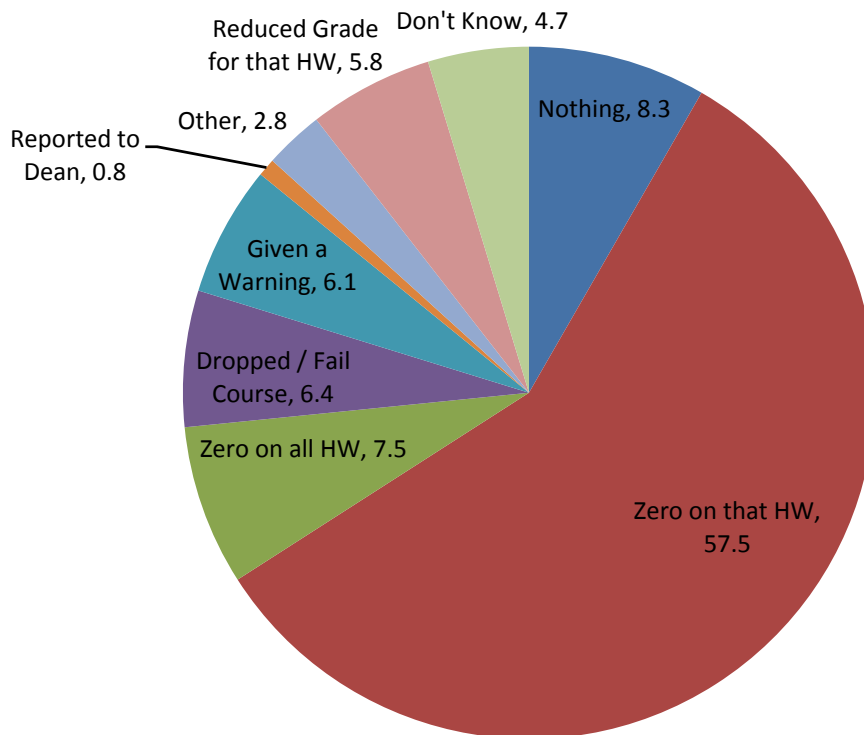


Figure 1 – Student-reported percentages for the “usual penalty” when caught copying a homework assignment.

It is reasonable to assume that more substantial penalties for copying homework assignments, and a more uniform application of standards and penalties within all of their engineering courses, would reduce the rate of cheating among students. While not specifically investigated by the survey, it is similarly reasonable to presume that students accustomed to engaging in inappropriate copying on homework assignments become increasingly likely to engage in other forms of cheating, such as plagiarism and copying in exams.

IV. Student Awareness of Rules and Regulations

When asked whether they were aware of the Student Academic Integrity Code (found in each year's University Catalog), 70.4% of student said yes, 29.6% of student said no. That 30% of student reporting being unaware that such a code exists may indicate the opportunity to raise student awareness of university expectations relative to academic integrity.

A practical reflection of the level of student awareness of academic integrity expectations is found in the response a survey question where students are asked to identify the activities that are considered plagiarism among a list that contains: (1) copying words from a website into a research paper and not citing the reference, (2) using the ideas from another source, changing the words around while you summarize, but not citing the reference, (3) using photos from a website in your research paper without providing a reference. Although each of these activities is, by the definitions provided in the Student Academic Integrity Code, a violation of rules pertaining to plagiarism, only 23.1% of students identified all three of these activities as being considered plagiarism.

Conclusions

The results of this study identify the perceptions and behavior towards academic honesty among students at an American-style university in the Middle East. The majority of students surveyed (74%) indicated sometimes engaging in behavior that would generally be classified as academic dishonesty. Variations in the rate of cheating among students from different engineering majors, along with correlations between student perception of faculty apathy towards academic honesty and rate of student cheating, suggest that professors' expectations and policies can have an impact on the perceived importance of academic honesty and cheating behavior among students. 53% of the students polled said that copying homework assignments has either no effect or a favorable effect on their education, a statistic that suggests a lack of understanding of the importance of individual effort in education.

27% of students reported that their professors do not try to determine if cheating has occurred on homework assignments, indicating a perceived lack of faculty involvement in enforcing honesty in the classroom. Lack of faculty engagement in academic honesty issues may be related, in part, to students' admission that being punished for cheating would cause them to reduce their evaluation of faculty teaching efforts in end-of-semester surveys.

Among the root causes reported in the literature for student academic dishonesty is a lack of leadership among university administrators in providing workable definitions of academic misconduct, the effect of which is to have instructors and students develop their own interpretations of what actions constitute cheating [9]. In the research presented herein, there is evidence of room for improvement among administrators and faculty at an American-style university in the Middle East in setting clear and consistent academic integrity guidelines, and *willingly* enforcing them in a serious and uniform way so that engineering students are encouraged to learn the material required to become competent professionals and habits needed to be ethical engineers.

References

- [1] Passow, H.J., M.J. Mayhew, C.J. Finelli, T.S. Harding, and D.D. Carpenter, "Factors influencing engineering students' decisions to cheat by type of assessment", *Research in Higher Education* Vol. 47, No. 6, 2006, pp. 643-684.
- [2] McCabe, D.L., "Classroom cheating among natural science and engineering majors", *Science and Engineering Ethics* Vol. 3, 1997, pp. 433-445.
- [3] Mattei, N., "Comparison of cheating behaviors in undergraduate engineering students and the general student population at the University of New Orleans", *ASEE Annual Conference*, Pittsburgh, Pennsylvania: American Society of Engineering Education, 2008.
- [4] Whitley, B.E., "Gender differences in cheating attitudes and classroom cheating behavior: A meta-analysis", *Sex Roles* Vol. 41, No. 9/10, 1999, pp. 657-680.
- [5] Harding, T.S., "On the frequency and causes of academic dishonesty among engineering students", *ASEE Annual Conference*, Albuquerque, New Mexico: American Society of Engineering Education, 2001.
- [6] Whitley, B.E., "Factors associated with cheating among college students: A review", *Research in Higher Education* Vol. 39, No. 3, 1998, pp. 235-274.
- [7] Schneider, A., "Why professors don't do more to stop students who cheat", *Chronicle of Higher Education*, 1999, pp. A8-A10.
- [8] Finelli, C.J., T.S. Harding, D.D. Carpenter, and H.J. Passow, "Students' perceptions of both the certainty and the deterrent effect of potential consequences of cheating", *ASEE Annual Conference*, Nashville, Tennessee: American Society of Engineering Education, 2003.
- [9] Smith, A.N., J.A. Ozment, and W.C. Newstetter, "Causes for cheating: Unclear expectations in the classroom", *ASEE Annual Conference*, St. Louis, Missouri: American Society of Engineering Education, 2000.

Appendix

Academic Honesty – Student Survey

Thank you for your participation in this survey. This survey will take about 10 minutes total to complete. Your input is extremely important.

The information collected in this survey is completely anonymous.

There are no "right" or "wrong" answers. Just answer as accurately as possible, and if you wish, feel free to add any additional comments at the end of the survey.

1. What is your major?
2. Specify your gender.
3. What year did you enter the university?
4. What is your most-recent TOEFL score?
5. What is your nationality?
6. What is your current academic status?
 - Freshman
 - Sophomore
 - Junior
 - Senior

7. What year were you born?
8. How many semesters did you attend IEP?
9. How many hours are you taking this semester?
10. Do you live in the dorms?
11. What is your cumulative GPA?

Cheating Questions

1. Do you consider it “cheating” to copy another student’s homework assignment?
2. What do you think about copying homework assignments?
 - It HELPS learning.
 - It HURTS learning.
 - It has NO EFFECT on learning.
3. In general, what percent of homework assignments do you copy (at least part) from another student? (Remember: this survey is anonymous, and no personally-identifiable information can be recorded.)
4. In general, what percent of lab reports do you copy (at least part) from another student?
5. Do your professors try to find out if homework assignments are copied?
 - Yes, they actively search for it.
 - No, they don’t actively search for it.
6. In your classes, what is the usual penalty if a student is caught copying a homework assignment?
7. In what percent of your courses is the homework solution manual available BEFORE the homework due-date (such as a solution manual passed down from previous semesters, or downloaded from an internet source)?
8. Does your professor post the homework solution online after the homework assignment is due?
9. In your opinion, which of the following are considered “plagiarism”? (Select all that apply)
 - Copying words from a website into a research paper and not citing the reference.
 - Using the ideas from another source, changing the words around while you summarize, but not citing the reference.
 - Using photos from a website in your research paper without providing a reference.
10. What percent of the time do you cheat during in-class quizzes or exams?
11. In an exam, if Student A allows Student B to copy answers:
 - Both Student A and Student B are guilty of cheating.
 - Only Student A (the person providing the answer) is guilty of cheating.
 - Only Student B (the person taking the answer) is guilty of cheating.
 - Neither student is guilty of cheating.
12. When students are caught cheating, is it partly the instructor’s fault for assigning too much work?
13. When you cheat, most often it is because of:

- Time pressure - the student doesn't have enough time to do everything that is assigned or to study everything in time
- Excessive difficulty of the material - the assignment, quiz, or test is beyond the ability of the student
- Opportunity - it was possible to cheat, so the student just did it
- Laziness - the student didn't feel like putting in the effort required to learn the material
- Peer pressure - everyone else was cheating
- Other (please specify)

14. How would you characterize the amount of cheating in your classes?

- Cheating is widespread – many students cheat; it occurs frequently.
- Cheating is occasional – some students cheat; it occurs occasionally.
- Cheating is rare – few students cheat; it occurs rarely.
- Cheating does not ever occur.

15. Are you aware of the Student Academic Integrity Code?

16. Does the size of a classroom, or how crowded it is, have an effect on whether you are likely to cheat during an in-class quiz or exam?

17. If you are punished for cheating in a course, would that lower the evaluation score you assign at the end of the semester?

18. Which courses are you most likely to cheat in?

- Engineering
- Math & Science
- Humanities & General Education Courses (e.g., history, psychology, sociology, international relations, etc.)