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# **AC 2012-3385: UNDERGRADUATE ENGINEERING STUDENT ACADEMIC INTEGRITY: COMPARISON OF INTERNATIONAL AND DOMESTIC STUDENTS**

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# Undergraduate Engineering Student Academic Integrity: Comparison of International and Domestic Students

## **Abstract**

A survey about academic integrity issues was administered to 473 undergraduate engineering students from 12 universities in the United States and 6 universities outside of the United States. The survey posed questions about students' opinion of what types of actions do or do not constitute cheating, about student motivations for cheating or not cheating, student perceptions of how frequently their peers engage in academically dishonest activities, perception of faculty efforts to inhibit and punish cheating, and the degree to which students themselves (or external forces) should be held responsible for academically dishonest behavior when it occurs. Comparisons of proportions were conducted to identify statistically significant ( $\alpha = .05$ ) differences in survey responses between domestic and international students.

Significant differences between the two populations were observed relative to the number of students who admit to cheating, the frequency with which they engage in academically dishonest behavior, student motivations for cheating, and student impression of how much their peers cheat.

## **Introduction**

Academic integrity has received increasing attention in the last decade. Numerous studies have looked at the definition of plagiarism, its perception by students, its extent and different ways of dealing with it. [1] provides an extensive review of the literature. However, most research in this area has focused on North America. In fact, 93% of the member institutions listed on the website [2] of the International Center of Academic Integrity are based in North America according to a count in early 2012. At the same time, the Asia Pacific Forum on Educational Integrity had a total of only seven members [3].

Universities around the globe have introduced honor codes to teach students about integrity and to help prevent violations from occurring [4]. Even though the increasing ease of copying through access to digital sources may make plagiarism more tempting, it is critical for students to clearly understand faculty and institutional expectations, especially as increased globalization results in a more diverse perception of what constitutes academic integrity.

Many established Western universities are involved in the development of campuses abroad, but there has been limited research about potential differences in student attitudes towards cheating and other academic integrity issues. The goal of some of these campuses is to establish curricula

and academic standards equivalent to those found on Western campuses. The internationalization of higher education, including students and faculty members, is a factor that makes it important to consider potential variations in perception with respect to the importance and impact of issues related to academic integrity.

This study investigates student attitudes about academic integrity, including a comparison of results from students from different countries and differences in perception about what types of activities are considered academically dishonest. While the interpretation of the meaning of certain words used in the survey instrument may vary from individual respondent to respondent (e.g., what does it mean to have ‘cheated’ in high school?), by comparing the pooled responses from different groups, it is possible to characterize aggregate variations in perceptions and behaviors with respect to academic integrity.

Compared to other studies looking at the impact of diversity on academic integrity and how to adjust to greater diversity [5][6], this paper uses a survey instrument to measure actual student attitudes, behavior and perception. Although also using a survey, [7] focuses on marketing and business students and investigates one cultural dimension only: individualism vs. collectivism. [7] contains a valuable summary of the variables examined and the resulting findings of previous work on academic dishonesty across nations.

### **Study Approach and Methodology**

A 49-question survey was developed to assess student behavior, perception, and attitudes as related to academic integrity issues. This survey is provided in the Appendix, and was completed by 473 undergraduate engineering students. Responses from undergraduate engineering students located in the United States of America, hereafter referred to as the “USA” group (n=381) were compared to responses from countries outside of the United States, hereafter referred to as the “INTL” group, including students from Qatar (n=61), Oman (n=8), Australia (n=9), the United Arab Emirates (n=8), China (n=1), (Ecuador n=1), Germany (n=1), Lebanon (n=1), Liberia (n=1), and Yemen (n=1). The INTL group included students from five different universities in the Middle East, and one university in Australia.

Questions were included in the survey to determine other basic demographic characteristics of survey respondents (e.g., gender, credit hours enrolled, year in school, whether they live in dorms, etc.). Analyses of group sub-populations are not reported in this paper, nor were responses screened from the USA or INTL groups to ensure identical sub-population profiles.

Proportions of students in each response category were compared for the USA group and INTL group to determine whether statistically significant differences existed in the percentage of students found in each category. A one-tailed Z-test was utilized to determine whether the percentage of international students in each response category were significantly greater than, or

less than, the percentage of USA students in the same category. Z-test statistic is calculated by first determining the Pooled Sample Proportion, PSP (Equation 1), then calculating the Standard Error, SE (Equation 2), and finally the Z-test Statistic, Z (Equation 3). P-value is calculated from the Z-test statistic assuming a normal distribution.

$$PSP = \frac{P_1 n_1 + P_2 n_2}{n_1 + n_2} \quad (\text{Equation 1})$$

$$SE = \sqrt{P(1-P) \left( \frac{1}{n_1} + \frac{1}{n_2} \right)} \quad (\text{Equation 2})$$

$$Z = \frac{P_1 - P_2}{SE} \quad (\text{Equation 3})$$

where:

$P_1$  = Sample proportion from population 1 (i.e., USA)

$P_2$  = Sample proportion from population 2 (i.e., INTL)

$n_1$  = Size of sample 1

$n_2$  = Size of sample 2

A 95% confidence level (i.e.,  $\alpha = .05$ ) was selected such that when a significant difference of “Yes” is indicated, there is a 95% probability that it is correct to reject the null hypothesis that the two groups are the same – that the proportion of students in a certain response category is the same for both USA and International students. In other words, when a significant difference of “No” is indicated, this means that there is more than a 5% chance that a randomly-selected subset of population 2 would have the same response as population 1.

For survey responses that included continuous data, Z-test of a single mean (see Equation 4) was used to determine whether differences between USA and INTL were statistically significant.

$$Z = \frac{\bar{x} - \mu}{\sigma / \sqrt{n}} \quad (\text{Equation 4})$$

where:

$\mu$  = Mean value of USA students

$\sigma_x$  = Standard deviation of USA students

$\bar{x}$  = Mean value of INTL students

$\sigma_{\bar{x}}$  = Standard deviation of INTL students

$N$  = Number of USA students

Where statistically significant differences are identified, the analyses performed do not distinguish between whether the difference between the two groups in response to a certain survey question is because of a difference in student behavior, whether the difference is due to a difference in interpreting the meaning of words found in the survey question, or some combination of the two. In other words, while a statistically significant difference in response is identified for some questions, the source of or reason for this difference in response may not be clear. For example, 16.4% of the INTL group indicates that cheating at their university is done “openly,” compared to only 7.0% of respondents from the USA group. This difference in proportions is statistically significant, but the analyses that have been performed do not address the degree to which the source of this difference may be due to an actual difference in behavior, a different understanding of certain words in the survey question (e.g., “openly”, “cautiously”, “conceal”, etc.), or some other factor. Thus, from the standpoint of comparing two different populations, the applicability of some questions from this survey effort is to identify potential differences in perception, behavior, and/or understanding of issues related to academic integrity.

## **Results and Discussion**

The collected responses to the survey were analyzed in order to generate comparisons of responses from undergraduate engineering students studying in the United States (USA) with the responses from undergraduate engineering students studying in countries outside the United States (INTL). Summaries of results with respect to student attitudes about academic integrity (Table 1), student perceptions (Table 2), and student behaviors (Table 3) are provided below. In Tables 1-3, “N” indicates the number of responses there were to a given question. Inasmuch as this paper represents an overview and first reporting of the results of this survey effort, not all of the survey results are presented or discussed in detail herein.

42.4 % of the USA students said that they “Never Cheat” (see Table 1, Q30), compared to 24.6% of INTL students. This equates to 57.6% of US engineering undergraduate students who admit to cheating, compared to 75.4% in the international group, a difference that is statistically significant. This same trend of elevated levels of cheating being present among international undergraduate engineering students is also visible in the response to the questions, “how often do you copy homework assignments?” and “how often do you cheat on exams” (see Table 3, Q24 & Q26). For USA students the average rate of homework copying that is reported is 9.1% of assignments, compared to 16.8% of assignments for international students, a difference that is statistically significant. Similarly, the rate of cheating on quizzes and exams is higher for international students (5.2% of the time) than US students (2.4% of the time). It is important to make the distinction between the percentage of students who admit to have cheated at some time during college (e.g., 75.4% of international students) and the *rate* of occurrence for behaviors that may be considered academically dishonest (e.g., on average international students indicate that they copy homework assignments 16.8% of the time).

Table 1 - Comparison of student attitudes about academic integrity

Question	Response <sup>1</sup>	USA		INTL		p	Sig. Diff
		N	%	N	%		
When you cheat, MOST OFTEN it is because of (select up to two):  (Q30)	a) Time	335	46.6	69	68.1	0.00	Yes
	b) Material difficulty	335	42.1	69	46.4	0.26	No
	c) Opportunity	335	3.9	69	4.3	0.44	No
	d) Laziness	335	9.0	69	15.9	0.04	Yes
	e) Peer pressure	335	0.9	69	4.3	0.02	Yes
	f) Unfair system	335	3.9	69	13.0	0.00	Yes
	g) I never cheat	335	42.4	69	24.6	0.00	Yes
	h) Other	335	7.5	69	5.8	0.31	No
If you help another student to cheat, what are the main motivations for doing so? (Select all that apply.)  (Q20)	a) Money	342	2.3	72	0.0	0.10	No
	b) Feel obligated	342	15.5	72	40.3	0.00	Yes
	c) Friendship	342	45.9	72	62.5	0.01	Yes
	d) Fear	342	1.8	72	12.5	0.00	Yes
	e) Anger at professor	342	2.6	72	5.6	0.09	No
	f) Course unreasonable	342	25.7	72	26.4	0.45	No
	g) Payback	342	26.3	72	31.9	0.17	No
	h) None	342	43.6	72	25.0	0.00	Yes
If you decide not to cheat, what are the primary reasons? (Select all that apply.)  (Q33)	1) Religious	336	26.8	70	52.9	0.00	Yes
	2) Fear of punishment	336	49.1	70	51.4	0.36	No
	3) Against values	336	64.0	70	61.4	0.34	No
	4) Harms learning	336	62.2	70	47.1	0.01	Yes
	5) No need to cheat	336	52.4	70	51.4	0.44	No
	6) Other	336	5.7	70	4.3	0.32	No

<sup>1</sup>: Full response options are provided in the survey instrument included in the Appendix.

When asked about their motivations for cheating (Table 1, Q30), “Time” was the factor with the greatest number of responses among those who cheated in both groups. However, this was a factor for a significantly greater proportion of INTL students than for USA students (i.e., 68.1% vs. 46.6%). Other statistically significant differences were in the number of INTL students indicating that “laziness” was a reason for their cheating (15.9% vs. 9.0%), and relatively elevated number of INTL students indicating that “peer pressure” (4.3% vs. 0.9%) or an “unfair system” (13.0% vs. 3.9%) was a primary motivator for cheating.

Resolving the student concerns that motivate cheating may be an effective measure at encouraging academic integrity; if INTL students feel disproportionately pressured with respect to the time that they have available for their school work, for example, academic advisors could take measures to reduce the number of credit hours that students enroll in to help ensure that they do not become overloaded, or instructors could reduce the workload in their courses. Similarly, departmental efforts to spread out the dates during which midterm exams are offered might work to alleviate the stressors that trigger academically dishonest activities.

When polled about the primary reasons why students decide not to cheat, there were two significant differences between USA and INTL students: the proportion of students who avoid cheating for religious reasons, and the percentage of students who avoid cheating because of their belief that it harms learning. 52.9% of INTL students indicated that religious reasons are a primary factor in avoiding cheating, compared to 26.8% of USA students. USA students, on the other hand, were more likely to avoid cheating because it hurts learning (62.2% vs. 47.1%). An understanding of which reasons not to cheat are most important to students in different countries could aid instructors in focusing their efforts to persuade students to be academically honest.

Table 2 - Comparison of student perceptions about academic integrity issues

Question <sup>1</sup>	Response <sup>2</sup>	USA		INTL		p	Sig. Diff	
		N	%	N	%			
17- Cheating concealment	1) Cheat openly	345	7.0	73	16.4	0.00	Yes	
28- Perception of # cheat	1) Widespread	342	17.3	71	29.6	0.01	Yes	
	3&4) rare or not ever	342	44.2	71	33.8	0.05	No	
29- Impression cheat freq.	1) Nearly every HW	343	22.7	71	38.0	0.00	Yes	
	3&4) rare or not ever	343	49.0	71	31.0	0.00	Yes	
32- Parents reaction cheat	1) Very upset	336	53.6	71	54.9	0.42	No	
	3) Not care	336	7.1	71	5.6	0.32	No	
	4) Don't know	336	20.8	71	21.1	0.48	No	
34- HW copy penalty	1-4) No / Minor penalties	330	46.1	67	74.6	0.00	Yes	
	5-7) Major penalties	330	15.2	67	13.4	0.36	No	
	8) Don't know	330	35.8	67	9.0	0.00	Yes	
39- Prof. care about cheat	1) Don't care	330	2.7	65	6.2	0.08	No	
	3) Care a lot	330	40.9	65	41.5	0.46	No	
	4) Don't know	330	8.2	65	4.6	0.16	No	
Question <sup>1</sup>	USA			INTL			p	Sig. Diff
	N	AVG	SD	N	AVG	SD		
40- Solution manual in what % of courses	306	27.8	30.5	60	22.5	25.4	0.09	No
41- Same HW as previous semester in what % courses	167	35.4	30.2	49	24.2	28.5	0.00	Yes

<sup>1</sup>: Full question text is provided in the survey instrument included in the Appendix.

<sup>2</sup>: Full response options are provided in the survey instrument included in the Appendix.

Students' perception of the academic environment around them may have important interactions with their attitudes about the acceptability of cheating, and their likelihood in engaging in academically dishonest behavior [8]. As indicated by the response to a question that asked whether cheating at their university occurred openly or was concealed by students (see Table 2), INTL students were significantly more likely than USA students to indicate that cheating occurred in the open without concealment (16.4% vs. 7.0%). This relatively higher rate of openness about cheating among INTL students may interact with elevated perceptions that cheating is "widespread", which 29.6% of INTL students indicated, compared to only 17.3% of USA students.

Likewise, INTL students have a significantly higher perception about how often those around them copy homework assignments, with 38.0% of international students reporting that students in their classes cheat on “nearly every homework assignment”, compared to 22.7% of USA students.

INTL students report significantly reduced penalties for copying homework assignments compared to USA students, with 74.6% saying that the typical penalty when caught copying a homework assignment are punishments that, since they are no more harsh than the outcome of not submitting an assignment in the first place, are unlikely to have a deterrent effect against submitting another student’s work: “Nothing,” “Given a warning,” “A reduced grade for that homework assignment,” or “A zero on that homework assignment”. For USA students, 46.1% of students indicate that these are the typical penalty for copying a homework assignment. Interestingly, a substantial number of USA students (i.e., 35.8%) are unaware of the penalty for copying a homework assignment.

Differences in the behavior and perceptions of international students compared to USA students might not be due to differences in parental or instructor expectations. Perceived likely response to being caught cheating was remarkably similar for USA and INTL students, with about 55% of each group indicating that their parents would be “very upset” to find out. Similarly, USA and INTL students had a similar profile in their perception of how much professors care about cheating in their courses, with about 40% in each group saying that their professors “care a lot”. In both of these questions one might hope that parents and professors would be communicating more clear expectations and high standards than the students seem to understand, but the minimal differences in the responses to these questions suggest that the cause of significant differences in cheating behavior may be due to other factors.

When asked to identify which courses they are most likely to cheat in (Q31, Table 3), a significantly higher percentage of INTL students indicated that “math & science” courses were the ones that they were most likely to cheat in compared to USA students (23.9% vs. 15.2%). 44.9% of USA students responded “I never cheat” to this question, which is consistent with the 42.4% of USA students who indicate that they do not cheat in question 30 (see Table 1). However, 33.8% of INTL students answered “I never cheat” on Q31, which is higher than the 24.6% who responded in a similar way on question 30. Thus, depending on which of the survey question responses one considers, the rate of cheating among INTL students may be somewhere between 66.2% and 75.4%.



Table 3 - Comparison of student academic integrity behaviors

Question <sup>1</sup>	Response <sup>2</sup>	USA		INTL		p	Sig. Diff	
		N	%	N	%			
31- Courses cheat in	1) Engineering	341	15.5	71	16.9	0.39	No	
	2) Math & Science	341	15.2	71	23.9	0.04	Yes	
	3) Humanities	341	12.0	71	7.0	0.11	No	
	4) All courses equally	341	12.3	71	18.3	0.09	No	
	5) None - I never cheat	341	44.9	71	33.8	0.04	Yes	
Question <sup>1</sup>	USA			INTL			p	Sig. Diff
	N	AVG	SD	N	AVG	SD		
24- How often do you copy HW assignments (%)	341	9.1	16.4	71	16.8	24.3	0.00	Yes
25- How often do you copy lab reports (%)	342	7.1	15.9	73	7.6	16.7	0.41	No
26- How often do you cheat during Quiz/Exams (%)	344	2.4	9.5	72	5.2	14.4	0.01	Yes

<sup>1</sup>: Full question text is provided in the survey instrument included in the Appendix.

<sup>2</sup>: Full response options are provided in the survey instrument included in the Appendix.

## Conclusions

Administration and analysis of a survey assessing undergraduate engineering student behavior, attitudes, and perceptions relative to academic integrity issues identified the following differences between students in the USA group compared to students in the INTL group:

- A significantly greater number of INTL students (between 66.2% - 75.4%) admit to cheating compared to USA students (57.6%). Likewise, the frequency that students report to engage in academically dishonest activities is greater for INTL students (e.g., 16.8% of homework assignments are copied, on average) than USA students (e.g., 9.1% of homework assignments).
- Time pressure is a significantly greater motivating factor when it comes to cheating for INTL students than for USA students (68.1% vs. 46.6%), as is the perception that the academic system is unfair (15.9% for INTL vs. 9.0% for USA)
- Motivations for avoiding cheating are significantly different between INTL and USA students, with 52.9% of INTL students identifying religious reasons as a primary factor not to cheat (compared to 26.8% of USA students). The perception that cheating “harms learning” is a primary reason to avoid cheating for 62.2% of USA students, compared to 47.1% of INTL students.
- Compared to USA students, INTL students perceive that cheating around them (a) occurs more openly, (b) is engaged in by a greater number of their peers, and (c) happens more frequently.

- Although anticipated parental reactions to cheating and perception of faculty attitudes about cheating are similar between INTL and USA students, INTL students report generally lighter typical penalties for copying homework assignments.

In view of these results, additional analysis is anticipated in order to identify correlations between the students in each population who report that they cheat and their respective attitudes and perceptions relative to such issues as the ubiquity of cheating around them, faculty attitudes about cheating, and motivations for avoiding cheating when it is not engaged in. Likewise, additional research is warranted to investigate variations in students' definitions of which activities constitute "cheating", and how these perceptions may interplay with a willingness to engage in homework copying and complicity in helping others to cheat.

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## Appendix - Survey instrument

[Note: In the survey questions listed below, categorical responses have been numbered or are otherwise labeled for ease of reference. In the actual survey instrument utilized, responses were not numbered, and in fact were randomized such that their order of appearance varied from respondent to respondent.]

1. I have read the Consent to Participate and give my consent to participate in this survey
  - 1) Yes
  - 2) No
  
2. Specify your gender.
  - 1) Male
  - 2) Female
  
3. What country are you currently residing in?
  
4. How long have you been living in your present country of residence?
  - 1) Less than 1 year
  - 2) 1-3 years
  - 3) 3-8 years
  - 4) 8+ years
  
5. Which country did you live in previously (if applicable)?
  
6. Please enter your high school grades average, and the rating scale used. (For example: 3.3/4.0 or 87/100 or 2.3/6)
  
7. What is your most-recent TOEFL score or IELTS score? (Leave blank if you have not taken the TOEFL or IELTS.)
  
8. How many semesters did you attend a full-time intensive English language training program or foundation year after high school, but before starting your major courses at university?
  - 1) None - I did not attend
  - 2) 1
  - 3) 2
  - 4) 3
  - 5) 4
  
9. In what University are you presently enrolled?
  
10. What is your major?
  - 1) Computer Science
  - 2) Chemical Engineering
  - 3) Civil Engineering
  - 4) Computer Engineering
  - 5) Electrical Engineering
  - 6) Mechanical Engineering
  - 7) Medicine
  - 8) Nursing
  - 9) Other (please specify)

11. What is your current academic status? (Note: do not count time spent in non-degree-seeking preparatory programs, such as intensive English training)
- 1) First year student (i.e., "Freshman")
  - 2) Second year student (i.e., "Sophomore")
  - 3) Third year student (i.e., "Junior")
  - 4) Fourth year student (i.e., "Senior")
12. How many credit hours (or credit points) are you taking this semester?
13. What is your cumulative grade average at your current university, and what is the scale? (For example: 2.85/4.0 or 75/100 or 2.6/6)
14. Do you live in the dorms?
- 1) Yes
  - 2) No
15. Which of the following study methods do you regularly use? (Check all that apply.)
- a) Attending class lectures
  - b) Working on homework assignments together with other students
  - c) Reading the textbook
  - d) Printing notes provided by the instructor
  - e) Taking my own handwritten notes during class lectures
  - f) Copying other students' notes because they are better in taking notes
  - g) Researching on the internet
16. In your opinion, which of the following are considered "cheating"? (Check all that apply.)
- a) Completely copying another student's homework assignment and submitting it as your own work
  - b) Doing part of a homework assignment yourself, copying part of the assignment from another student, and then submitting the assignment as your own work
  - c) Solving a question that you could only answer because you accidentally saw the solution and then submitting it
17. At your university, students who cheat:
- 1) Cheat openly, without really trying to hide it.
  - 2) Cheat somewhat cautiously, with some efforts to conceal what they are doing.
  - 3) Are very careful about cheating, taking extreme measures to avoid being detected.
  - 4) I don't know.
18. In an exam, if Student A allows Student B to copy answers:
- 1) Both Student A and Student B are guilty of cheating.
  - 2) Only Student A (the person providing the answer) is guilty of cheating.
  - 3) Only Student B (the person taking the answer) is guilty of cheating.
  - 4) Neither student is guilty of cheating.
19. In general, what do you think about copying homework assignments?
- 1) It HELPS learning.
  - 2) It HURTS learning.
  - 3) It has NO EFFECT on learning.
  - 4) I don't know.

20. If you help another student to cheat, what are the main motivations for doing so? (Select all that apply.)
- To get money from the student I am helping to cheat.
  - The other student asked me and I feel obligated to say yes.
  - The other student is my friend and I want to help him or her.
  - I am afraid of the other student, and feel too intimidated to say no.
  - I am angry at the professor or university, and helping another student cheat is revenge.
  - The course expectations are unreasonable.
  - To get the help from this student another time, or to pay them back for helping me previously.
  - None of the above would ever motivate me to help another student cheat.
21. 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.
22. At some universities, students are given academic integrity regulations during orientation, or at the beginning of each semester. Have you ever been given a paper copy of your university academic integrity regulations?
- Yes
  - No
  - I don't remember
23. Did you ever cheat in high school?
- Yes
  - No
24. How often (% of the time) do you copy at least part of a HOMEWORK assignment from another student? FOR EXAMPLE: If there are 10 assignments in a semester, and you copy at least part of 2 of them, then that is 20%. If you never copy homework assignments, then that is 0%. (Remember: this survey is anonymous.)
25. How often (% of the time) do you copy at least part of a LAB REPORT from another student?
26. How often (% of the time) do you cheat during QUIZZES or EXAMS?
27. Would you consider paying somebody to do school work (e.g., homework, lab reports, writing assignments) that was assigned for you to do?
- Yes
  - No
28. What is your perception of how many students cheat in your classes?
- Cheating is widespread – more than 50% of students sometimes cheat.
  - Cheating is occasional – 25% - 50% of students sometimes cheat.
  - Cheating is rare – few students cheat; it occurs rarely.
  - Cheating does not ever occur.

29. What is your impression of how often other students cheat in your classes?
- 1) Nearly every homework
  - 2) About every second homework
  - 3) Rarely
  - 4) Never
30. When you cheat, MOST OFTEN it is because of (select up to two):
- a) Time pressure - the student doesn't have enough time to do everything that is assigned or to study everything in time
  - b) Excessive difficulty of the material - the assignment, quiz, or test is beyond the ability of the student
  - c) Opportunity - it is possible to cheat, so I just do it
  - d) Laziness - I don't feel like putting in the effort required to learn the material
  - e) Peer pressure - everyone else is cheating
  - f) Unfairness of the academic system - some rules or practices of the university or course are not fair, so I cheat to balance that out.
  - g) I never cheat.
  - h) Other (please specify)
31. Which courses are you most likely to cheat in?
- 1) Engineering
  - 2) Math & Science
  - 3) Humanities & General Education Courses (e.g., history, psychology, sociology, international relations, etc.)
  - 4) All different types of courses equally
  - 5) None - I never cheat.
32. What is your impression of how your parents feel about if you were cheating?
- 1) My parents would be very upset if I cheat. If I cheated I would be careful to conceal it from them.
  - 2) My parents would be somewhat upset if I cheat, but eventually would understand or I could convince them it was okay.
  - 3) My parents would not really care if I cheat.
  - 4) I don't know.
33. If you decide not to cheat, what are the primary reasons?
- a) Religious reasons.
  - b) Fear of getting caught and being punished.
  - c) It is against my personal values.
  - d) Because cheating would interfere with my learning.
  - e) I feel no need to cheat.
  - f) Other (please specify)
34. In your classes, what is the usual penalty if a student is caught copying a Homework Assignment?
- 1) Nothing
  - 2) Given a warning
  - 3) A reduced grade for that homework assignment
  - 4) A zero on that homework assignment
  - 5) A zero for all homework assignments for the entire semester
  - 6) Reported to the Dean, Department Chair, or Academic disciplinary committee
  - 7) Dropped from the course / given a failing grade
  - 8) I don't know
  - 0) Other (please specify)

35. In your classes, what is the usual penalty if a student is caught copying a Lab Report?
- 1) Nothing
  - 2) Given a warning
  - 3) A reduced grade for that homework assignment
  - 4) A zero on that homework assignment
  - 5) A zero for all homework assignments for the entire semester
  - 6) Reported to the Dean, Department Chair, or Academic disciplinary committee
  - 7) Dropped from the course / given a failing grade
  - 8) I don't know
  - 0) Other (please specify)
36. In your classes, what is the usual penalty if a student is caught cheating in a Quiz or Exam?
- 1) Nothing
  - 2) Given a warning
  - 3) A reduced grade for that homework assignment
  - 4) A zero on that homework assignment
  - 5) A zero for all homework assignments for the entire semester
  - 6) Reported to the Dean, Department Chair, or Academic disciplinary committee
  - 7) Dropped from the course / given a failing grade
  - 8) I don't know
  - 0) Other (please specify)
37. Have you ever been caught cheating while at your university?
- 1) Yes
  - 2) No
38. If you HAVE been caught cheating at the university, did you stop cheating after you were caught, or did you continue cheating.
- 1) Not applicable - I have never been caught cheating at university and/or have never cheated at university.
  - 2) Yes - after being caught I stopped cheating.
  - 3) No - after being caught I continued cheating.
39. What is your impression about how much professors care about students cheating in their classes?
- 1) Professors do not care at all whether students cheat in their classes.
  - 2) Professors care somewhat about student cheating, and take some measures to prevent it.
  - 3) Professors care a lot about students cheating, and work vigorously to prevent it.
  - 4) I don't know.
40. 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)? FOR EXAMPLE: If a homework solution manual is available in 1 of your 5 classes, then that is 20%.
41. In what percent of your courses do professors give you the same HOMEWORK PROBLEMS as was assigned to students in a previous semester? (Note: if you don't know, just type in "?")
42. In what percent of your courses do professors give you the same LAB ASSIGNMENTS as was assigned to students in a previous semester? (Note: if you don't know, just type in "?")

43. In what percent of your courses do professors give you the same EXAMS as were given to students in a previous semester? (Note: if you don't know, just type in "?")

44. In general, do your professors post a copy of the homework solution online after the homework assignment is due?

- 1) Yes, this happens a lot.
- 2) This occurs sometimes.
- 3) This rarely happens.
- 4) This never happens.

45. When students are caught cheating, is it partly the instructor's fault for assigning too much work?

- 1) Yes
- 2) No

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

- 1) Yes
- 2) No

47. What year were you born?

48. What is (are) your nationality(ies)?

49. Please feel free to provide any comments or feedback. (Optional)