
Ohio University

Academic Integrity Revisited

A One-Year Follow-Up

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April 4, 2007

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Executive Summary

This report is a follow-up to the report "An Honest Look at Academic Dishonesty at Ohio University¹," which was released just over a year ago. The goal of this study was to find out whether measurable changes have occurred and to obtain additional information that might assist OU in promoting academic integrity across the university. A random sample of undergraduates, graduate students, and faculty was invited to share responses to open- and closed-ended items in an online survey. Analysis of their responses indicates the following:

- Academic dishonesty has decreased over the past year. The percentage of students who reported engaging in behaviors categorized last year as Academic Misconduct (the most serious forms of academic dishonesty) decreased from 44.7% to 21.6% for undergraduates and from 17.7% to 13.7% for graduate students.
- The levels of academic dishonesty are lower at OU than the average at U.S. and Canadian colleges and universities.
- Factor analysis of the seriousness of specific behaviors suggests that faculty and students might think differently about what constitutes academic dishonesty. Items that were previously considered minor (Copying Sentences) plagiarism were seen as serious (Academic Misconduct) plagiarism, and collaboration was seen as more ambiguous.
- Faculty and graduate see academic dishonesty as being slightly more serious than do undergraduate students.
- The three motives most commonly attributed to plagiarism and cheating on exams were 1) belief that they won't get caught, 2) belief that they will get a better grade, and 3) laziness.
- Respondents indicated that it would be appropriate for consequences to be given more often than they believe is now likely to occur. The largest gaps for were seen for the use of education about writing and ethics, suggesting that we should require educational sanctions for academic dishonesty more often.
- Course syllabi, student and faculty handbooks, and faculty are the sources from which most people learned about OU's academic misconduct policies.
- Course size, course relevance, course difficulty, assignment type, instructor caring, and a priority shift away from learning were all discussed as factors that heavily influence whether students are likely to engage in academic dishonesty.

While we cannot be certain whether the changes in the amount of academic dishonesty reported reflect decreased academic dishonesty behavior or a decreased willingness to admit to engaging in academic dishonesty, either possibility suggests that the overall culture at OU has shifted toward valuing academic integrity. However, responses also suggest that OU must continue to emphasize the importance of academic integrity and value quality teaching and learning.

¹ Broeckelman, M.A., & Pollock, T.P. Jr. (2006, March 13). *An Honest Look at Academic Dishonesty at Ohio University*. Athens, Ohio University, School of Communication Studies. Available online at <http://oak.cats.ohiou.edu/~mb128405/final%20report.pdf>.

Introduction

In March of 2006, the research report "An Honest Look at Academic Dishonesty at Ohio University"², which found that levels of academic dishonesty at OU were higher than the national average, was released at about the same time that news of investigations of allegedly plagiarized theses in the Russ College of Engineering and Technology became a national news item. That report and the thesis investigations prompted a series of initiatives aimed at promoting a culture of academic integrity across the university. This report is a follow-up study that was conducted to find out whether measurable changes have occurred over the past year and to obtain additional information that might assist the university in developing effective academic integrity initiatives.

Like the 2006 report, this study included quantitative and qualitative analyses to help obtain a more complete picture of the status of academic integrity at Ohio University. This report includes sections on the demographic characteristics of the sample, quantitative analysis, qualitative analysis, and discussion and recommendations.

² Broeckelman, M.A., & Pollock, T.P. Jr. (2006, March 13). *An Honest Look at Academic Dishonesty at Ohio University*. Athens, Ohio University, School of Communication Studies. Available online at <http://oak.cats.ohiou.edu/~mb128405/final%20report.pdf>.

Demographic Information

A list of 700 faculty members, 1000 graduate students, and 2000 undergraduate students on the Ohio University Athens campus was randomly generated by the Computer Services Center, and all selected potential participants were invited to take the survey via three separate emails. Responses were submitted by 194 undergraduate students, 146 graduate students, and 198 faculty members for a total of 538 participants, or an overall response rate of 14.5%. 237 (44.1%) of the participants were male, 291 (54.1%) of the participants were female, and 10 (1.9%) preferred not to disclose their sex. Table 1 shows the distribution of the sample by college. Figures 1-3 show the distribution within each group by college.

Undergraduate students reported studying at OU for a mean of 6.44 quarters (SD = 5.5), graduate students reported studying at OU for a mean of 7.72 quarters (SD = 5.8), and faculty reported teaching or working at OU for a mean of 12.67 years (SD = 9.8).

The random sampling technique used and demographic characteristics of the participants suggests that it is appropriate to draw inferences about the Ohio University-Athens population from this sample.

Table 1.

Frequency Distribution of Respondents by Group and by College

	<u>Undergraduate</u>		<u>Graduate</u>		<u>Faculty</u>		<u>Total</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Arts & Sciences	69	36%	60	4%	93	47%	222	41%
Business	18	9%	4	3%	18	9%	40	7%
Communication	30	16%	16	11%	16	8%	62	12%
Education	12	6%	30	21%	11	6%	53	10%
Fine Arts	9	5%	15	10%	16	8%	40	7%
Health & Human Services	23	12%	11	8%	17	9%	51	10%
Tutorial College	6	3%	1	1%	0	0%	7	1%
Osteopathic Medicine	0	0%	0	0%	10	5%	10	2%
Engineering & Technology	10	5%	8	6%	17	9%	35	7%
University College	17	9%	1	1%	0	0%	18	3%
Total	194	36%	146	27%	198	37%	538	100%

Note: All percentages are rounded to the nearest full percentage point, so the columns might not add up to the total percentage.

Figure 1. Undergraduate Students by Year in School

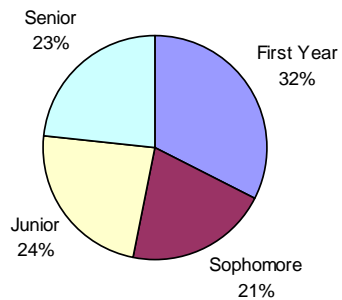


Figure 2. Graduate Students by Program Type

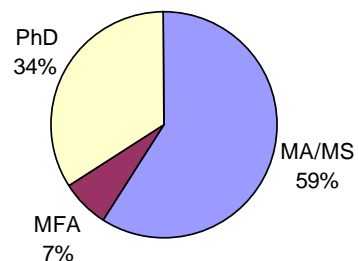
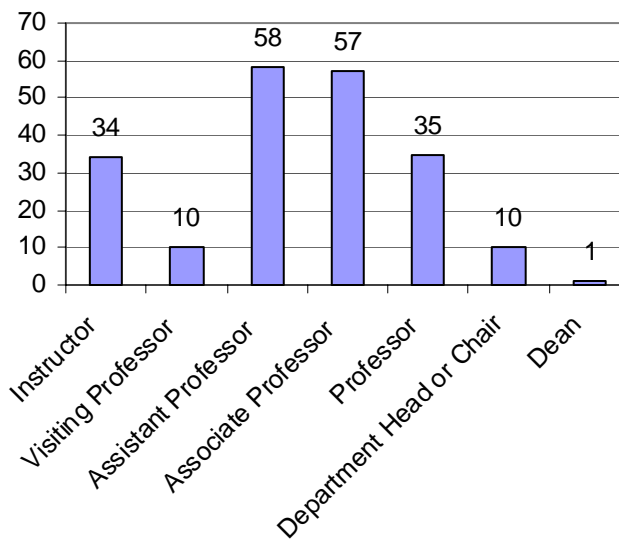


Figure 3: Faculty by Rank



Quantitative Results

In order to compare the results from the study conducted a year ago to this year's results, the closed-ended response portion of the survey included many of the same items as the 2006 survey contained. However, to obtain additional information that could be helpful for understanding the factors underlying academic dishonesty while trying to keep the survey as short as possible, many questions were eliminated, modified, and added. The closed-ended items that were analyzed using quantitative statistical analyses were organized into sections about the seriousness of and engagement in or observation of specific academic dishonesty behaviors³, attitudes toward plagiarism⁴, motives for plagiarism and cheating, likely and appropriate consequences, and information about where respondents learned about academic misconduct policies at OU.

Comparison of Self-Reported Behaviors, 2006-2007

Since one area of concern in the 2006 report was the higher than average levels of self-reported engagement in academic dishonesty behaviors, I began by creating summed variables for each of the four factors, or types of academic dishonesty, discussed in the 2006 report: Academic Misconduct, Collaboration, Copying Sentences, and Library Misconduct. The file was split by group, and descriptive statistics were run for each variable. For ease of comparison, Table 2 shows the percentage of undergraduate and graduate students who report engaging in and percentage of faculty who report observing each type of academic dishonesty alongside the percentages reported in the 2006 report.

With the exception of Collaboration among graduate students, these results show a decrease in the proportion of students who report engaging in each type of academic dishonesty behavior. However, faculty report observing more Collaboration and Library Misconduct than they reported observing in last year's survey. As was discussed in the 2006 report, collaboration is often used as a pedagogical strategy and is not always a form of academic dishonesty. Since it is not uncommon for graduate students to work on team research projects, the increase in reported Collaboration does not necessarily reflect an increase in academic dishonesty.

³ From McCabe, D.L. (2003). *2003 Spring Semester Kansas State University Academic Dishonesty Survey*. (15 October 2005). <http://www.k-state.edu/honor/researchlinks/mccabesurey2003/survey03.htm>. Used with permission.

⁴ From Harris, R.A. (2001). *The plagiarism handbook*. Glendale: Pyrczak. Used with permission.

Table 2

Academic Dishonesty Behaviors Engaged in or Observed, Using 2006 Categories

	Undergrad (engaged in)		Grad Students (engaged in)		Faculty (observed)	
	<u>2006</u>	<u>2007</u>	<u>2006</u>	<u>2007</u>	<u>2006</u>	<u>2007</u>
Academic Misconduct	44.7%	21.6%	17.7%	13.7%	68.3%	52.0%
Collaboration	74.6%	60.3%	43.8%	53.4%	41.5%	51.5%
Copying Sentences	29.4%	16.5%	6.3%	5.5%	48.8%	44.4%
Library Misconduct	2.4%	2.1%	2.1%	2.05%	2.4%	6.1%
All Behaviors	84.1%	66.0%	55.2%	59.6%	**	73.2%

** Not included in the 2006 report.

Note: Differences in values between this table and table 4 are due to the use of different categories for Academic Misconduct, Collaboration, and Copying Sentences and to rounding to .1% instead of to .01%.

Comparison to North American Academic Dishonesty Levels

In addition to comparing this year's survey responses to last year's Ohio University findings, a second comparison was made between this year's responses and the North American averages obtained by Don McCabe using the same survey items. McCabe's⁵ most recent article that includes averages for specific behaviors includes responses from 71,071 undergraduates; 11, 279 graduate students; and 12,316 faculty on 83 campuses in the United States and Canada between 2002 and 2005.

As can be seen in Table 3, the percentage of undergraduate and graduate students to report engaging in each behavior and the percentage of faculty members who report observing each behavior is lower than the North American average, with two exceptions. Slightly more OU graduate students report copying material word for word from a written source. Also, more OU undergraduate and graduate students report working on an individual assignment with others.

These findings suggest that OU students engage in less academic dishonesty than students on other campuses. Even more encouraging for OU, the largest proportion gaps between the OU and North American average can be seen in academic misconduct level behaviors, or the most serious types of academic dishonesty.

⁵ McCabe, D.L. (2005). Cheating among college and university students: A North American perspective. *International Journal for Academic Integrity*, 1, <http://www.ojs.unisa.edu.au/journals/index.php/IJEI>

Table 3

*North American Comparison of Academic Dishonesty Behaviors Engaged in and Observed**

	<u>Undergrad</u>		<u>Graduate</u>		<u>Faculty</u>	
	OU	NA	OU	NA	OU	NA
Using unpermitted crib notes (cheat notes) during a test	3%	8%	1%	4%	10%	26%
Turning in a paper copied from another student	1%	8%	1%	4%	11%	38%
Copying on test from another with their knowledge	3%	9%	1%	3%	9%	33%
Helping someone else cheat on a test	2%	10%	1%	6%	12%	29%
Copying on test from other without their knowledge	5%	11%	0%	4%	16%	41%
Turning in a paper obtained in large part from a term paper "mill" or website that did not charge for this information	1%	3%	1%	2%	5%	29%
Writing or providing a paper for another student	1%	**	1%	**	8%	**
Turning in work done by someone else	2%	7%	0%	3%	23%	45%
Falsifying/fabricating research data	1%	8%	1%	4%	6%	21%
Providing a graded assignment to another student to submit	3%	**	1%	**	5%	**
Cheating on a test in another way	0%	**	0%	**	7%	**
Fabricating/falsifying a bibliography	4%	14%	1%	7%	12%	34%
Falsifying/fabricating lab data	5%	19%	1%	7%	7%	21%
Cheating on a written assignment in another way	2%	**	1%	**	8%	**
Copying material word for word from written source	5%	7%	6%	4%	28%	59%
Altering a graded test and submitting it for additional credit	2%	**	1%	**	5%	**
Copying few sentences from written source without citing	12%	38%	4%	25%	41%	80%
Copying a few sentences of material from an Internet source without footnoting them in a paper	13%	36%	4%	24%	35%	69%
Using a false excuse to obtain an extension on due date	9%	16%	7%	17%	36%	49%
Hiding library or course materials	2%	**	2%	**	4%	**
Damaging library or course materials	0%	**	1%	**	3%	**
Working on an individual assignment with others	49%	42%	29%	26%	43%	60%
Sharing an assignment with others to use as an example	39%	**	39%	**	18%	**
Copying a friend's computer program	4%	11%	5%	7%	8%	39%
Receiving unpermitted help on an assignment	11%	24%	6%	13%	18%	44%
Getting Q/A from someone who has taken test	12%	33%	9%	17%	9%	35%

Note: Percentages for undergraduate and graduate students represent the percent of students to admit to engaging in each behavior. Percentages for faculty represent the percent of faculty who observed students engaging in each behavior.

*North American percentages are taken from McCabe, D.L. (2005). Cheating among college and university students: A North American perspective. *International Journal for Academic Integrity*, 1, <http://www.ojs.unisa.edu.au/journals/index.php/IJAI>

** Represents items for which no information was available

Table 4

Factors on the Cheating Seriousness Scale

Item	Factor		
	1	2	3
Using unpermitted crib notes (cheat notes) during a test	<u>.928</u>	.233	.133
Turning in a paper copied from another student	<u>.922</u>	.236	.142
Copying on test from another with their knowledge	<u>.909</u>	.234	.142
Helping someone else cheat on a test	<u>.902</u>	.243	.160
Copying on test from other without their knowledge	<u>.879</u>	.184	.133
Turning in a paper obtained in large part from a term paper “mill” or website that did not charge for this information	<u>.876</u>	.208	.165
Writing or providing a paper for another student	<u>.868</u>	.202	.137
Turning in work done by someone else	<u>.832</u>	.199	.181
Falsifying/fabricating research data	<u>.797</u>	.284	.203
Providing a graded assignment to another student to submit	<u>.782</u>	.263	.178
Cheating on a test in another way	<u>.781</u>	.417	.166
Fabricating/falsifying a bibliography	<u>.773</u>	.265	.248
Falsifying/fabricating lab data	<u>.756</u>	.302	.271
Cheating on a written assignment in another way	<u>.724</u>	.428	.216
Copying material word for word from written source	<u>.721</u>	.219	.223
Altering a graded test and submitting it for additional credit	<u>.664</u>	.289	.234
Copying few sentences from written source without citing	<u>.640</u>	.305	.309
Copying a few sentences of material from an Internet source without footnoting them in a paper	<u>.605</u>	.302	.335
Using a false excuse to obtain an extension on due date	.454	.452	.344
Hiding library or course materials	.333	<u>.827</u>	.236
Damaging library or course materials	.351	<u>.709</u>	.198
Working on an individual assignment with others	.066	.037	<u>.661</u>
Sharing an assignment with others to use as an example	-.015	.074	<u>.635</u>
Copying a friend’s computer program	.263	.214	<u>.526</u>
Receiving unpermitted help on an assignment	.429	.319	.497
Getting Q/A from someone who has taken test	.367	.220	.492
Eigenvalue	15.98	2.00	1.06
% of Variance	61.46	7.71	4.08
Chronbach’s Alpha	.98	.88	.65

Note: Underlined factor coefficients show which factor the item is loaded on.

Factor Analysis

Since another goal of this follow-up study was to find out whether attitudes toward and beliefs about behaviors that constituted academic dishonesty had changed, I also ran an exploratory factor analysis to see whether items about the seriousness of particular behaviors would load onto the same factors as they did last year. In order to see how behaviors would group together, exploratory factor analysis was run on the seriousness of behaviors scale, employing Principal Axis Factoring procedures with Varimax rotation. Bartlett's Test of Sphericity was significant, suggesting that the data met the assumptions necessary for factor analysis, $\chi^2 = 16526.786 (325)$, $p < .001$. The Eigenvalue scores indicated that three factors should be retained, which was supported by the Scree Plot. Based on the rotated factor matrix, three factors (using a false excuse to obtain extension on due date, receiving unpermitted help on an assignment, and getting Q/A from someone who has taken the test) were not retained because they did not meet the liberal 60/40 criteria for factor loadings. Although one factor (copying a friend's computer program) did not exceed the .60 loading on its primary factor, it was retained because its secondary loading was less than .4. The three factors together accounted for 73.25% of the total variance. Table 4 indicates which questions were included in each factor.

Next, items comprising each factor were analyzed for reliability. Using Chronbach's Alpha, reliability estimates were .98, .88, and .65 for the three factors. The reliability for the scales could not be improved by removing any individual item, so all factor items were retained.

When comparing the items that loaded onto each factor with the items that loaded onto factors in the 2006 survey, a few interesting observations can be made. First, all the items that loaded onto the Academic Misconduct and Copying Sentences factors in the 2006 survey loaded onto a single factor this time. Whereas Copying Sentences was previously seen as a separate and less serious form of academic dishonesty than Academic Misconduct in 2006, these results indicate that Copying Sentences is now indistinguishable from other forms of Academic Misconduct in terms of whether it is seen as a serious violation. This suggests that a shift in the understanding about what "counts" as academic dishonesty has taken place.

Second, all of the items that loaded onto Library Misconduct in 2006 also loaded onto a single factor (Factor 2) in this survey. Considering the rarity of occurrence for these behaviors and the availability of online library materials, this comes as no great surprise.

Finally, of the five behaviors that loaded as Collaboration in the 2006 survey, only three loaded onto Factor 3. Two did not load onto any factor. While the reliability of the Collaboration items in 2006 was .78, the reliability of the items that loaded onto Factor 3 in this survey had a low .65 alpha reliability score that most would argue is too low to be considered a real factor. This suggests that collaboration has become a more ambiguous rather than more clearly understood and defined area. Since collaboration is often used as a pedagogical approach and is only considered by most to be academic dishonesty in particular contexts, this decreasing clarity about whether it is a serious

form of academic dishonesty might reflect more complex thinking and decreased consensus about the role of collaboration.

Taken together, these changes suggest that faculty and students at Ohio University potentially think differently about what constitutes academic dishonesty than they did a year ago.

For the purposes of the rest of this analysis, I will refer to Factor 1 as Academic Misconduct, Factor 2 as Library Misconduct, and Factor 3 as Unauthorized Collaboration unless otherwise noted. However, it is important to keep in mind that while the factor labels and items are similar, the items included are not in all cases identical to those included in the 2006 report. Appropriate explanations and recalculations will be given where necessary to allow for the comparison of findings between the two studies.

Perceived Seriousness

Next, summed variables were created for each of the factors. To find out whether there were differences in the perceived seriousness of each type of academic dishonesty and whether there were differences in the perceived degree of seriousness between groups, a MANOVA with one independent variable (group) and three dependent variables (Academic Misconduct Seriousness, Library Misconduct Seriousness, and Unauthorized Collaboration Seriousness) was conducted. The correlations between all of the dependent variables were significant ($p < .001$), indicating that a MANOVA would be appropriate. Box's M test for the equality of covariance matrices was violated, $F(12, 1164576) = 2.782$, $p = .001$, so Hotelling's Trace corrections were used for the subsequent analysis. Multivariate tests indicated that a significant effect was present for the overall model, $F(6, 1064) = 7.744$, $p < .001$, $\eta_p^2 = .042$.

The Levene's Test of Equality of Error Variances was significant for Academic Misconduct ($p < .001$) and for Library Misconduct ($p = .012$), but not for Unauthorized Collaboration ($p = .051$), so the more conservative significance level of .01 was used as a cutoff in univariate tests. Tests of between-subjects effects that examined whether there were differences between groups for the perceived seriousness of each type of academic dishonesty were all significant. For Academic Misconduct, $F(2, 537) = 7.996$, $p < .001$, $\eta_p^2 = .029$. For Library Misconduct, $F(2, 537) = 8.086$, $p < .001$, $\eta_p^2 = .029$. For Unauthorized Collaboration, $F(2, 537) = 20.129$, $p < .001$, $\eta_p^2 = .070$.

Pairwise comparisons were then used to find out which groups were significantly different for each type of academic dishonesty. Undergraduates reported that all three types of academic dishonesty were statistically significantly different than did faculty members. However, the only type of academic dishonesty for which there was any statistically significant difference between graduate students and faculty was Unauthorized Collaboration. The mean seriousness for all three types of academic dishonesty was highest for faculty and lowest for graduate students. All means are reported in Table 5, and confidence intervals for all means are depicted visually in Figures 4-6. These findings are the same as those in the 2006 report. However, we should be cautious in interpreting the practical significance of these findings. While there are statistically significant differences, the effect sizes are very small despite

having observed power between .95 and 1.0 for the overall and between-subjects tests. This indicates that the differences, while statistically significant, might have little practical significance.

Table 5

Mean Seriousness of Type of Dishonesty

	All Respondents	Faculty	Grad Students	Undergrads
Academic Misconduct	4.64 (.79)	4.78 (.62) _a	4.66 (.82) _b	4.47 (.90) _{ab}
Library Misconduct	4.17 (1.10)	4.34 (1.01) _c	4.26 (1.09) _d	3.92 (1.16) _{cd}
Unauthorized Collaboration	3.29 (.95)	3.59 (.90) _{eg}	3.29 (.97) _{fg}	2.99 (.91) _{ef}

Note: Standard deviations are reported in parentheses. Means with the same subscripts are significantly different at the .05 level.

Figure 4. Mean Academic Misconduct Seriousness

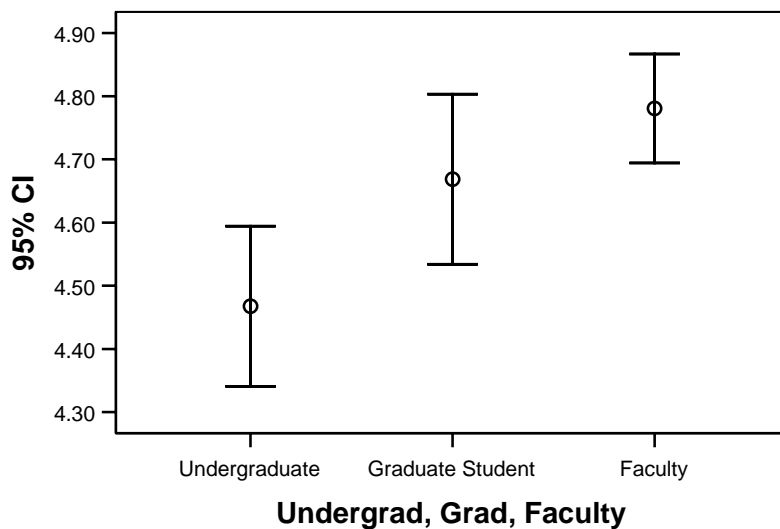
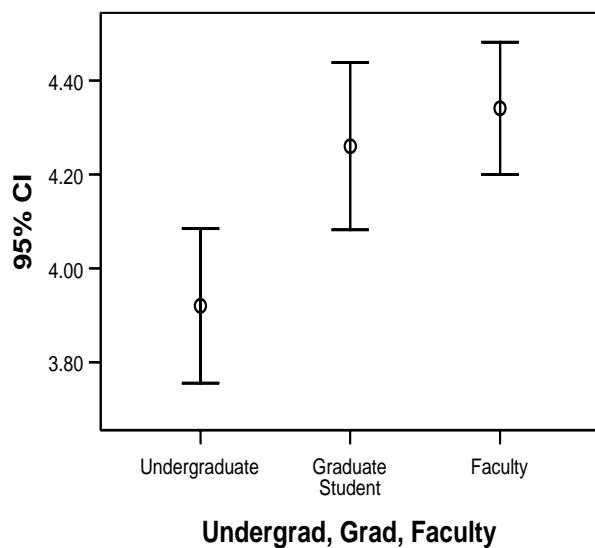
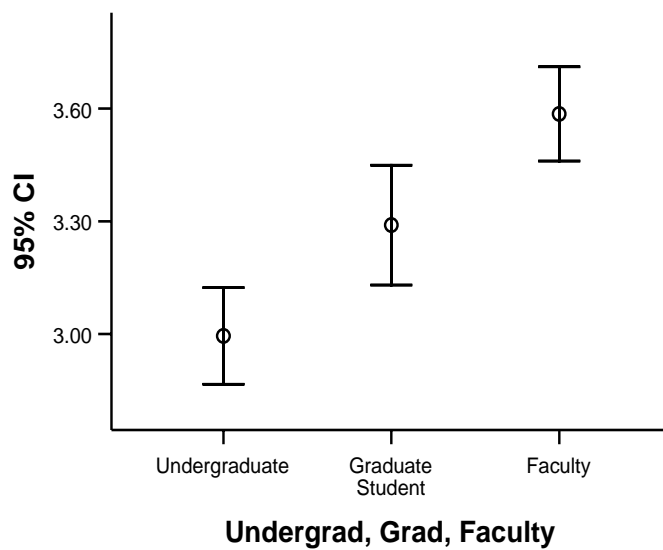


Figure 5. Mean Library Misconduct Seriousness**Figure 6. Mean Unauthorized Collaboration Seriousness**

Academic Dishonesty Behaviors

Since the academic dishonesty behaviors grouped into different factors this year, another set of summed variables was created to reflect these factors. To find out how many students reported engaging in academic dishonesty behaviors and how many faculty reported observing academic dishonesty behaviors, descriptive statistics were run for the new summed variables by group. The total percentages of each group that reported engaging in or observing each type of behavior are reported in Table 6.

Table 6

Academic Dishonesty Behaviors Engaged in or Observed

	Undergrad (engaged in)	Grad Students (engaged in)	Faculty (observed)
Academic Misconduct	29.38% (57)	16.44% (24)	59.60% (118)
Library Misconduct	2.06 % (4)	2.05% (3)	6.06% (12)
Unauthorized Collaboration	57.73% (112)	52.05% (76)	46.46% (92)
All Behaviors	65.98% (128)	59.59% (87)	73.23% (145)

Note: Values in parenthesis represent the number of participants.

Attitudes Toward Plagiarism Scale

As a means of verifying the construct validity of using the ratings of the seriousness of specific behaviors to measure attitudes about academic dishonesty, Robert Harris's Attitudes Toward Plagiarism (ATP) Scale⁶ was included on the survey. The ATP Scale includes twelve items that are scored on a five-point Likert scale. After five items are reverse coded, higher scores on the ATP Scale represent more lenient attitudes toward plagiarism, and lower scores represent more conservative or strict attitudes.

After reverse coding the scores for five of the questions, the ATP scores were summed into a final score and divided by twelve to keep the scores on a five-point scale. A ONEWAY ANOVA was then used to determine whether significant differences in attitudes toward plagiarism existed among faculty, graduate students, and undergraduate students. Since Levene's Test of Homogeneity of Variances was significant, $p = .022$, Welch's test was used. Welch's test was significant, $F(2, 335.616) = 16.398, p < .001$, which means that significant differences were present in the overall model. Games-Howell post hoc tests, with alpha set at .01 to adjust for familywise inflation of alpha, were used to test for mean differences between groups. As can be seen in Table 7,

⁶ From Harris, R.A. (2001). *The plagiarism handbook*. Glendale: Pyrczak. Used with permission.

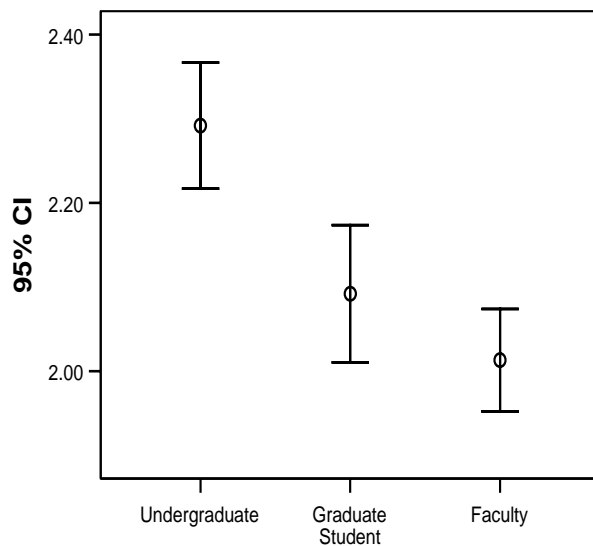
significant differences were found between undergraduate and graduate students and between undergraduate students and faculty, but not between graduate students and faculty. Figure 7 gives a visual representation of the 95% confidence intervals for the means. The statistically significant differences between undergraduates and all others, but not between graduate students and faculty, corroborates with the findings described earlier from the perceived seriousness of behaviors scale items.

Table 7

Mean Attitudes Toward Plagiarism Scores

Group	<i>M</i>	<i>SD</i>
Undergraduate students	2.29 _{ab}	.53
Graduate students	2.09 _a	.50
Faculty	2.01 _b	.43

Note: Higher scores represent more lenient attitudes.
Means with the same subscript are significantly different at the .01 level.

Figure 7. Attitude Toward Plagiarism Means

Motives

Another portion of this survey asked what motives are most often attributed to plagiarism and cheating on exams. A list of fourteen potential motives for academic dishonesty was developed from interview data collected in 2006 and from research literature. Respondents were asked to rate each item on a five-point Likert scale, indicating the degree to which they disagreed or agreed that it was a reason that students might plagiarize or cheat on exams. Table 8 summarizes the motives attributed to plagiarism, and Table 9 summarizes the motives attributed to cheating on exams. ONEWAY ANOVAs were run for each of the items, and significant differences are indicated in the tables below. For items that met the homogeneity of variance assumptions, Tukey post-hoc tests analyses were used. For items that violated Levene's test, Welch's test and Games-Howell post-hoc tests analyses were used.

Table 8

Mean Scores for Plagiarism Motives

	Faculty	Grad	UG
Belief that they won't get caught	4.30	4.15	4.11
Belief that they will get a better grade ³	4.30	4.17	4.08
Laziness	4.14	4.16	4.21
Didn't have time because of poor time management	3.92	4.11	3.91
Belief that other students are doing it ⁴	3.89	3.73	3.30
Lack of knowledge about source citation	3.32	3.57	3.54
Belief that the course material is unimportant	3.51	3.43	3.40
Belief that those who are caught are not punished ¹	3.78	3.18	2.87
Didn't have time because there was too much work to do ¹	2.72	3.18	3.57
Don't understand the course material	3.03	3.08	3.23
Belief that they deserve a good grade because they are paying high tuition ⁴	3.27	3.12	2.95
Afraid to ask the instructor for help ²	2.83	3.19	3.07
Don't understand the assignment ³	2.74	2.94	3.18
Belief that the teacher doesn't care	2.72	2.74	2.82

Note: Responses are listed in descending order according to the mean for all respondents.

1 Faculty, graduate students, and undergraduates are significantly different at the .05 level.

2 Faculty and graduate students are significantly different at the .05 level.

3 Faculty and undergraduate students are significantly different at the .05 level.

4 All groups except faculty and graduate students are significantly different at the .05 level.

Table 9

Mean Scores for Cheating Motives

	Faculty	Grad	UG
Belief that they will get a better grade	4.28	4.21	4.26
Belief that they won't get caught	4.18	4.06	4.09
Laziness	4.01	3.95	3.93
Didn't have time because of poor time management ¹	3.73	4.06	3.89
Belief that other students are doing it ⁴	3.73	3.69	3.37
Don't understand the course material ⁴	3.38	3.42	3.76
Belief that the course material is unimportant	3.47	3.43	3.53
Belief that those who are caught are not punished ³	3.51	3.07	2.83
Didn't have time because there was too much work to do	2.66	3.20	3.47
Belief that they deserve a good grade because they are paying high tuition	3.19	3.03	3.03
Don't understand the assignment ⁴	2.69	2.89	3.30
Afraid to ask the instructor for help ³	2.66	3.05	3.13
Lack of knowledge about source citation	2.62	2.68	2.86
Belief that the teacher doesn't care ²	2.48	2.71	2.85

Note: Responses are listed in descending order according to the mean for all respondents.

1 Faculty, graduate students, and undergraduates are significantly different at the .05 level.

2 Faculty and undergraduate students are significantly different at the .05 level.

3 All groups except graduate and undergraduate students are significantly different at the .05 level.

4 All groups except faculty and graduate students are significantly different at the .05 level.

It is notable that the ordering of motives that are attributed to plagiarism and to cheating on exams is very similar and that there are no significant differences between faculty, graduate students, and undergraduates for half of the motives. It should also be noted that the three motives that are most strongly attributed to both kinds of academic dishonesty—belief that they will get a better grade, belief that they won't get caught, and laziness— all potentially reflect an emphasis on grades rather than learning as the primary goal of students. This observation should be examined more deeply in future research.

Likely and Appropriate Actions

To find out what the perceived consequences of academic dishonesty are and should be, participants were asked to rate a list of thirteen items on five-point Likert scales. Each item was rated for likeliness (1= highly unlikely, 5= highly likely) and for appropriateness (1= highly inappropriate, 5= highly appropriate). Paired sample t-tests were run for each consequence to find out whether there were significant differences between which consequences participants thought were likely and which were appropriate. Results are shown in Table 10.

Table 10

Mean Likelihood and Appropriateness of Consequences for Academic Dishonesty

	Likely	Appropriate
*Grade reduction on the assignment	4.26	4.30
*Failing grade on the assignment/exam	4.21	4.52
*Reprimand or Warning	4.00	3.76
Grade reduction for the entire course	3.77	4.04
*Reported to University Judiciaries	3.52	4.15
*Required to redo the assignment/exam	3.48	3.60
*Failing grade for the course	3.48	3.81
*Placed on probation	3.22	3.88
*Sent to Writing Center or a class to learn about source citation	2.80	4.07
*Suspended from school	2.71	3.16
*Notation on transcript or permanent record	2.66	3.57
*Expelled from school	2.40	2.71
*Asked to take an ethics class	2.35	3.61

* Significant differences at the .05 level.

All but one of the items (grade reduction for the entire course) has significant differences between the degree to which participants thought the consequence was likely and the degree to which they thought it was appropriate. Moreover, for all but

one of the consequences with significant differences (Reprimand or warning), the mean for the appropriateness of the consequence was significantly higher than the mean likeliness of the consequence. This suggests that most participants either think that tougher punishments should be given or that those who are caught engaging in academic misconduct are less likely to face consequences than they should. Moreover, the largest mean differences were found for "Sent to the Writing Center or a class to learn about source citation" and "Asked to take an ethics class," indicating a belief that we especially need to be more to educate students about ethics and academic practices.

Sources of Information

The last set of questions with closed-ended responses asked respondents where they had learned about the academic misconduct policies at Ohio University. This information was gathered to find out what information sources are most effective for disseminating information about academic integrity policies. Table 11 shows the sources from which participants report learning about OU's academic misconduct policies.

Table 11

Sources from Which Participants Learned about OU's Academic Misconduct Policy

	All	Faculty	Grad	UG
Class syllabus	64.3%	34.8%	75.3%	86.1%
Student handbook	56.7%	42.4%	59.6%	69.1%
Faculty	54.1%	54.0%	52.1%	55.7%
Faculty handbook	31.2%	70.7%	12.3%	5.2%
New student orientation	25.8%	4.0%	32.2%	43.3%
Other students	21.2%	3.0%	30.8%	32.5%
News media	20.3%	21.2%	28.8%	12.9%
Faculty meeting	17.3%	44.9%	2.1%	0.5%
Academic advisor	14.7%	5.1%	22.6%	18.6%
Department chair/head	13.9%	28.3%	11.0%	1.5%
Deans or other administrators	12.6%	18.7%	9.6%	8.8%
Publicized results of judicial hearings	11.9%	18.7%	9.6%	6.7%
TA training	11.0%	6.6%	31.5%	0%
New faculty orientation	10.4%	26.3%	1.4%	1.0%
Never been informed about these policies	4.1%	3.5%	5.5%	3.6%
University calendar	2.2%	1.0%	3.4%	2.6%
Student Senate	1.5%	0%	0.7%	3.6%

Note: Participants could select more than one response, so responses will not add up to 100%.

Qualitative Results

In addition to the closed-ended response items, seven open-ended items were included at the end of the survey to give participants an opportunity to describe what kinds of courses, assignments, and instructors make it easier or harder to engage in academic dishonesty, and to allow participants to add any other comments that the survey items had not yet included.

To analyze the open-ended items, a constant-comparative method (or grounded theory) was used. This method was first developed by Glaser and Strauss in 1967 and is described as it has developed since then by Lindlof and Taylor⁷. For this analysis, the researcher read through the responses, looking for themes that emerged from the responses. While reading through the responses, the researcher created a list of categories into which the responses seemed to fit and added, combined, and modified the categories to fit all of the responses. A coding sheet was developed from these categories. Then the data was reexamined and codes were assigned to the responses. These open-ended items yielded a very detailed, rich pool of responses, but this analysis will only discuss the themes that were most prominent in the written responses. Six prominent themes that could be seen in the responses include (1) course size, (2) course relevance, (3) course difficulty, (4) assignment type, (5) instructor caring, and (6) priority shift away from learning.

Course Size

Course size was seen as one of the most important factors related to whether it is more or less likely that students engage in academic dishonesty in a given course. Respondents indicated that they believe it is easier to engage in academic dishonesty in a large course, in part because students often feel like they are anonymous. As one student explained, "Large lecture halls, courses in which the grading is done by multiple people, and situations in which students are tested while sitting in close proximity to one another" make it much easier for students to cheat. Large lecture courses are more likely to use multiple choice or true/false questions on exams because they can be easily graded using scantron forms. Respondents believed that it is particularly easy for students to cheat on exams when students are sitting close together in a crowded lecture hall and when they are not monitored closely during an exam. Many respondents, especially students, suggested that even if papers and written exams are used in large courses, they believe that these papers are usually either skimmed quickly or graded by TAs because of the time required to grade such a large volume of written work, and pointed out that many are unwilling to put a lot of work and time into a paper that will not be read closely or be given much written feedback.

On the other hand, respondents said that academic dishonesty is much less likely and much more difficult in small courses, particularly courses in which students are expected to participate in discussion and in which there is a lot of interaction between the instructor and students. They also suggested that essay exams and written assignments

⁷ Lindlof, T.R., & Taylor, B.C. (2002). *Qualitative communication research methods* (2nd ed.). Thousand Oaks, CA: Sage.

can be more easily given in smaller courses and that it is more likely that individual feedback will be given. Additionally, academic dishonesty is less likely in courses in which students are spread out and monitored closely during exams, which is possible in a large course but much more easily accomplished in a small course. As one faculty member described, academic dishonesty is least likely in "small seminar-type classes where there is a lot of professor/student interaction and thus capabilities are known—those classes where essays rather than anonymous, multiple-choice exams are given as tests."

Course Relevance

The second factor that respondents indicated was particularly important was course relevance. Respondents suggested that academic dishonesty is highly likely in courses that are perceived to be irrelevant or unimportant to the students' major, career, or life. Required introductory and general education courses were cited as being candidates for academic dishonesty, especially if the courses were also perceived to be uninteresting, whether because of the course material or because the instructor is not engaged in the material. One student explained that s/he thought that students are more likely to cheat in "classes that are part of a graduation requirement. Students often wonder how these classes fit into their major and do not think about the bigger picture." On the other hand, courses that are perceived to be interesting, important, and relevant to the students were described as being less likely to have students engaging in academic dishonesty.

Course Difficulty

The level of difficulty of the course was also cited as a common factor in academic dishonesty. There was some disagreement among respondents, but the overall consensus was that courses that are either too difficult or too easy are more likely to have students engaging in academic dishonesty. Respondents said that academic dishonesty is more likely when a course has an excessive or unfair workload for the amount of time given, especially if the assignment expectations are unclear. This was seen as especially true for difficult courses which students expected would be easy, particularly for students who are not well-prepared for the demands of the course. Many respondents also thought that academic dishonesty is likely in courses that require excessive amounts of writing, mathematical calculation, or scientific and technical knowledge by students who do not frequently use these skills in their particular field of study. At the other end of the spectrum, respondents said that academic dishonesty is also common in courses that have an extremely light workload and low expectations. Respondents suggested that the best courses that are least likely to foster academic dishonesty are those which have high standards and challenge students, but are also reasonable about the amount of work that students should be expected to do in a ten-week quarter. One faculty member explained:

From my experience, students tend to cheat on exams in courses which are not in their major and courses which they thought would be "easy" courses, but have turned out to not be easy. Students attempt to cheat on exams in 100 level courses more than upper level courses, in my

opinion. Plagiarism occurs more often when students are asked to write papers without having had a writing course or methods course in their major, or when they are writing a paper in a course that is not in their major, or when they perceive the work to be not important to them.

Assignment Type

While assignment type is often related to the size and type of course, it was mentioned by participants so often that it warranted discussion as a separate theme. Respondents said that academic dishonesty is far more likely when the same assignments, exams, and course materials are presented year after year. This is particularly true if the assignments are seen as "generic," "run-of-the-mill," "busywork," or requiring rote memorization and regurgitation of information. They also believed that plagiarism is more likely when large assignments are turned in at once (such as a large term paper due at the end of the quarter), when a single assignment accounted for a large portion of the grade, and when assignment and citation expectations were not made clear.

However, participants said that academic dishonesty is much less likely on assignments that are changed frequently and that have been tailored to fit the specific course and when assignments ask students to include opinions, personal examples, or applications. Academic dishonesty is also less likely when assignments require deep, critical or analytic thinking, and when it is clear that students' individual ideas and creativity are valued. Moreover, respondents suggested that academic dishonesty is less likely when students are asked to complete several assignments, none of which accounts for a disproportionately large percentage of the grade, and when students are asked to periodically turn in drafts or show their work. Plagiarism is less likely when assignment and citation expectations are explained well.

One student described assignments that make academic dishonesty less likely as ones in which the

assignment is clearly explained by the professor, doesn't have overwhelming large amount of weight in class compared to other assignments, what is considered plagiarism/cheating on the assignment is clearly defined, questions are easily answered, the professor clearly defines that he/she expects all students to do the assignment independently, and consequences are defined if students don't follow directions.

Instructor Caring

The degree to which instructors are perceived as caring about the course, academic integrity, and students was one of the most prominent themes that repeatedly emerged in the responses.

Respondents reported that academic dishonesty is more common when instructors do not seem to care about the courses they are teaching, especially if the instructor is not well-prepared, seems to skim papers and assignments, does not give meaningful

feedback, does not grade assignments, and seems more concerned with research than teaching. Academic dishonesty was reported as being less likely when instructors seem to care about the class, are engaged in the material, are organized, and provide good feedback. One faculty member said, "Most of all, the teacher must care, and that transfers to the students caring. Smaller classes, more faculty, and better compensated faculty will also help the 'caring factor' of the faculty and they will take more time and effort with their classes and course delivery."

The responses also suggested that academic dishonesty is more common in courses in which instructors do not seem to care about academic integrity. When instructors do not discuss academic misconduct, make jokes about academic dishonesty, or gain a reputation for being easy on cheaters, students are more likely to engage in academic misconduct because they believe that they will not be caught or punished. However, academic dishonesty is less likely when instructors make it clear that academic integrity is important to them by talking about academic honesty, checking for cheating and plagiarism, and punishing academic dishonesty when they find it. As one student said, "Instructors make it harder to engage in academic dishonesty by following through on their individual, department, and university policies regarding cheating and plagiarism. If an instructor has a reputation of holding students accountable for the work and academic honesty, students won't take chances."

Finally, and perhaps most importantly, respondents argued that academic dishonesty is less likely when instructors are approachable, available for help, empathetic, know their students individually, and genuinely care about their students. However, students are much less reluctant to engage in academic dishonesty when their instructors are unapproachable, unavailable for help outside of class, not empathetic, and do not seem to care about their students as individuals. As one student explained, "Instructors make it easier [to cheat] when they don't care about students as human beings or as students. Every person is unique with special needs. The need for empathy is great in all relationships—professional and personal." Another student said, "When instructors are interested in students and demonstrate the professionalism so essential for a good learning environment, they earn the respect of students and decrease the likelihood that students will turn to dishonest methods out of frustration, or lack of communication and/or the need for additional help."

Priority Shift away from Learning

Finally, many respondents suggested that priorities have shifted and that learning is no longer perceived as the central purpose of a university education.

For students, a focus on grades and obtaining a degree instead of on learning is seen as an important factor in academic dishonesty. As one student explained, "I think that the problem lies in the fact that most students are here only to get a slip of paper that gets them a job, and could care less about learning anything. So, they don't see cheating as hurting themselves but only as an easier way to reach their goal." One faculty member said, "Cheating seems to have increased in the ever increasing race for the A. The need for performance (on both sides, student and instructor) obliterates the need for a learning process to take place."

At a higher level, though, university policies that emphasize efficiency and productivity over learning might be contributing to high levels of academic dishonesty. One faculty member said:

If the administration continues to emphasize growing enrollments without providing the necessary faculty to teach them, class sizes will continue to grow so large that academic dishonesty will only continue to grow. Once, one of the attractive things about OU was its relative small faculty to student ratio.

Another faculty member explained, "The new budgeting model will reward large section classes ('productivity'). I struggle to deal with grading written assignments in classes of 40. The new model will make things worse."

Yet another said:

Unless the University changes its (unwise in my opinion) strategy of giving numbers the end-all for determining funding, this will likely continue to be a problem as faculty can not keep up with the work load and design assignments that are more easily copied. I think this is one of the largest contributing factors that the administration needs to seriously think about.

Students also expressed concern that universities are increasingly focused on goals other than teaching and learning. As one student put it:

Academic misconduct is one of many problems at any college. The fact of the matter is, college has become a place of business and not a place of higher education. If you want to stop kids from cheating they have to feel like their college and faculty members actually care about where they are going in the future.

Another said, "It is hard to take classes and work seriously when the fact that the university is a business is so blatantly waved in our faces."

It should also be noted that, unlike factors related to courses, assignments, and instructors, there were no questions anywhere in the survey to prompt thinking and responses about the role of the university priorities and plans, budget model, or administration on academic dishonesty. The prominence and frequency of responses related to these issues, many of which were much more inflammatory than the representative responses included here, suggests that this is a particularly salient concern for both faculty and students. As was indicated in many of the responses, we must be careful to ensure that learning remains a priority and that quality teaching is valued as highly as other kinds of activity in the university rewards structure.

Discussion and Recommendations

Over the course of the past year, Ohio University has taken many steps to address academic dishonesty. Provost Krendl formed the Academic Integrity Committee, co-chaired by Scott Titsworth and Susan Sarnoff, which has been investigating ways to promote a culture of integrity across campus. This committee hosted a Day of Discourse about academic dishonesty, conducted a Chairs and Directors' Survey to find out what individual units on campus were already doing, tested a pedagogy-based protocol for using turnitin.com, and drafted an honor code that is now being further developed by a group of students. Meanwhile, in the Russ College of Engineering and Technology, theses have been undergoing investigation, an Academic Integrity Advisor was appointed, Student and Faculty Academic Honor Councils were formed and have been working to develop an honor code that includes statements of student and faculty responsibility, and workshops have been held for faculty and students, among other initiatives. At the same time, a lot of media attention has been focused on OU and the prevalence of academic dishonesty at all universities.

While we certainly cannot claim that any of these factors have caused the changes seen in the results of this survey, we need to acknowledge that they are correlated with and very well could have influenced the results. As the results of this study show, the amount of self-reported engagement in and observation of academic misconduct has decreased. The way that faculty and students think about academic dishonesty also appears to have shifted slightly. While we cannot be absolutely certain as to whether these results are due to an actual reduction in academic dishonesty or a reluctance to admit to academic dishonesty, even on an anonymous survey, either possibility indicates a move toward a culture in which academic integrity is valued. And as the qualitative responses clearly showed, faculty and students across the campus have been thinking deeply about the complex factors that might contribute to academic dishonesty at this or any other university. While most literature places primary responsibility for academic dishonesty on student ethical decision-making ability, these responses indicate that faculty and students across campus are going a step farther and considering what kinds of course, instructor, and institutional factors might also contribute to academic dishonesty.

In light of these findings, I would like to make the following recommendations:

- Continue to promote a culture academic integrity through the formation of a university-wide honor code and honor council that will raise awareness and educate faculty and students about preventing and avoiding academic dishonesty.
- Enforce penalties for academic dishonesty that will deter intentional misconduct.
- Educate students about the academic practices that are expected.
- Consider ways in which courses and assignments can be made relevant to students and make sure that expectations are clearly communicated.
- Base course size decisions on what will best facilitate learning for all students.
- Emphasize the importance of quality teaching by supporting faculty development opportunities and ensuring that teaching is valued in the university rewards structure.