# Cheating control on exams<sup>1</sup>

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#### ABSTRACT

Cheating during exams occurs frequently. Numerous characteristics such as grade point average, moral values, ambition and course grade, which have been related to the prevalence of cheating, are discussed. The types of cheating which take place are mentioned for the benefit of new instructors as well as those with several years of teaching experience. Techniques for controlling cheating and confronting students who have cheated are noted. Procedures such as the honor code, close supervision, separation of students, multiple test forms, monitoring use of calculators, make-up exams, and handling confrontations are discussed.

Additional index words: Make-up exams, Testing procedures, Exam preparation, Exam supervision, Grading.

CHEATING on exams has existed for centuries (5). Although cheating may be difficult to eliminate in a classroom or laboratory setting, methods exist which can substantially curtail the incidence of cheating. The intent of this paper will be to present several techniques for reducing the incidence of cheating on examinations and to explain how to confront students suspected of cheating.

# LITERATURE REVIEW

## **Does Cheating Occur?**

Almost everyone cheats sometime. Several recent studies have attempted to quantify cheating. Leming (10) noted that under "high threat-high supervision" situations, 15% of the examinees cheated, while 24% cheated under "low threat-low supervision'' testing situations. Kelly and Worell (9) administered a test where bonus credits and self-grading tempted students to cheat. An analysis of their results indicated that 19.5% of the students cheated.

The studies of Kelly and Worell concerned college undergraduates, but cheating starts long before this and continues after the undergraduate degrees have been awarded. Schab (12) found that 23.5% of the high school girls and 20.4% of the high school boys recalled having begun cheating in the first grade. In a study of graduate students, Zastrow (14) noted that at least 40% cheated.

## Who Cheats?

"Almost everyone" isn't very specific, but it should serve as a guide to instructors wondering which students to supervise closely during exams. Some generalities include:

- Cheating tends to be more prevalent among students with low grade point averages (13) or low IQs (6).
- Males tend to cheat more frequently than females (2, 7, 9, 12).
- Students with low moral values or thoughts tend to cheat more than those with medium or high values (10).
- Cheaters are often overambitious (3) and are more extraverted (4).
- Cheating is more common among students professing high frequency of church attendance (7).
- Cheating becomes more prevalent in more advanced grades, for example, during the senior vs. freshman year (11).
- Students subjected to excessive paternal discipline, as well as students subjected to little, if any, paternal discipline, are more apt to cheat than students subjected to moderate discipline (13).

These generalities do not suggest that students characterized by traits other than those listed above refrain from cheating.

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## How Do We Control Cheating?

Bushway and Nash (5) recommended that research strategies should focus on techniques to prevent or reduce cheating. Leming (10) observed that less cheating occurred when stern warnings were given against cheating prior to the exam, and when close monitoring by more than one faculty member took place.

Houston (8) noted that cheating occurred primarily among students seated next to one another, or when a student had the opportunity to copy information from the student seated directly in front of him or from the individuals on either side of the person directly in front. By not allowing students to sit side-by-side, copying could be minimized.

Houston also noted that when tests were not used for determining a course grade, cheating was minimal. Obviously, elimination of the exam as a tool in determining compentency would be impractical for most instructors.

#### METHODS

Cheating during examinations can be curbed. To what extent depends on how much the instructor cares whether or not it happens, and on his or her ability to take appropriate action. Several techniques will be discussed and evaluated. Some methods work well; some are of questionable value.

## Honor Code

Some instructors, in a seemingly futile attempt to show concern, make students sign their names to statements on the exam "guaranteeing" their honesty. Two examples are:

- "I have neither given nor received aid in writing this examination. Signed \_\_\_\_\_\_"
- "I have neither received nor given information to others during the course of this exam. Signed \_\_\_\_\_\_"

Research data concerning the effectiveness of such statements are lacking. Hopefully those instructors who use the honor code system don't rely on it solely to curb cheating.

## Supervision

Leming (10) recommended close supervision of students during exams. Many instructors take advantage of examination time to catch up on reading, class preparation or grading, paying little attention to students who are completing exams (Fig. 1). This constitutes a "low threat-low supervision" situation which Leming found to significantly increase the amount of cheating, regardless of the moral character of the students in the room.

Some instructors carry on conversations with other faculty members or students who stop by the testing site. This is not only distracting for those taking the exam, but again presents opportunities for cheating due to the inattentiveness of the instructor. Some instructors actually leave the room during the examination, giving the impression that they have total faith in the honesty of the students, or that they could care less whether or not cheating occurs. Having more than one instructor in the room for supervision may be worse than having only one, if all they do is talk.

Instructors should make every attempt to be present during exams. Having a secretary, a graduate student, or even another instructor there to give an exam is an open invitation for students to take advantage of the situation, and may show lack of concern by the instructor for his or her students.

## Separation of Students

Houston (8) recommended separating students. In classrooms where separation is possible, do it! Don't feel that the students in the class will feel uncomfortable and untrusted. The students who are less apt to cheat will appreciate that the instructor intends to give appropriate credit to those students who have listened well in class and studied for the exam. Those students who are not prepared will have a more difficult time taking advantage of those that are prepared. Separation of students is almost mandatory in curbing cheating when large numbers of students are being tested at one time.

The effectiveness of separation was supported by 105 freshman/sophomore level students enrolled in a Forage Production and Management course at the University of Minnesota Technical College, Waseca. A survey distributed during the winter quarter, 1981, along with the final exam, asked them to evaluate the effectiveness of the exam seating arrangement (Fig. 2) on cheating reduction. Over two-thirds of the students felt that it was effective, while less than 30% weren't sure. It is interesting to note that none of the students felt that separation had no effect (Table 1).

# Those Roving Eyes

Many students who cheat will first look at the instructor before copying answers, for the obvious purpose of evaluating the supervision. If you find a student that spends a great deal



Fig. 1. Instructors who grade papers or read articles during exams provide inadequate supervision.



Fig. 2. When possible, eliminate side-by-side seating of students taking exams, minimizing copying.

Table 1. Student evaluation of separated seating as related to cheating control

Survey question	Yes	No	Don't know	No response
			%	
Do you feel that the seating arrangement reduced cheating?	69.5	0	28.4	1.9
Did you feel more at ease when you were spaced apart during exams?	82.4	9.0	0	8.6
Did distribution of different quiz copies during exams help to curb cheating?	56.7	3.8	38.6	0.9

of time watching you (Fig. 3), don't look away in embarassment, stare back! This is especially true if you have observed the student copying answers, and he looks up to see if you noticed. Let the cheater know that you are fully aware of his actions.

Also, don't be hesitant to stand by students who appear to be copying. Your proximity for a minute or two should make them sufficiently aware that doing their own work is expected.

## Multiple Test Forms

Some instructors make it difficult for students to obtain answers from others by preparing two copies of the same test. The questions may be the same, but their order of appearance is varied, or the choices (in the case of a multiple choice exam) are scrambled.



Fig. 3. Students who cheat often look at the exam supervisor before attempting to copy.



Fig. 4. Students may fail to clear shared calculators during the exam.

It is time-consuming to prepare more than one copy, and distribution may be difficult. But when used, multiple test forms can be very effective in reducing cheating. Most instructors could use more secretarial assistance so that time is available for preparing multiple test forms.

The same group of 105 Forage Production and Management students were asked to evaluate the effectiveness of multiple quiz copy distribution during the final exam. Slightly over half the class thought the technique was effective, while 30% were not sure (Table 1).

Instructors who ask questions that require mathematical calculations have a good opportunity to identify students who cheat. According to Schab (12), "Mathematics still retains its supreme position as the course in which most cheating is attempted". Since there are many agronomy courses which require mathematical calculations, this gives the instructor an opportunity to identify those likely to cheat.

By changing one number in a word problem, those that have the "right" answer, but the "wrong" exam, can be confronted and warned. An example follows:

A farmer desires to calibrate his sprayer, which has a 200-liter tank and a boom with 10 nozzles, spaced 46 centimeters apart. He sprays a distance of 152 meters at a constant speed and pressure, collecting a total of 19 liters of spray solution from the nozzles. What is the calibrated output in liters/hectare? SHOW CALCULA-TIONS FOR CREDIT.

The answer to the problem is 271 l/ha. On the atlernate exam (two copies, alternated throughout the room), the question would read exactly the same, except for "15" liters, thus the answer would be 215 l/ha. The change is so minor that students copying answers have little chance of detecting the difference.

## Different Colored Exam Papers

Printing the same exam on sheets of two different colors, attempting to make students believe that they are taking different exams, may be effective on the first exam; but after the exam, when students compare notes, they will know better. Also, if you have been known to have done this in the past, the word will get around to the new students, and even a first attempt will probably not be effective.

## Sharing calculators

Students commonly share calculators on exams, either because one of the students doesn't own one or because he has forgotten to bring one. Oftentimes, as calculators are passed back and forth, calculated answers are not cleared, thus it's a simple procedure to copy down the answer and then pretend to make a calculation (Fig. 4).

Don't be naive or passive. Ask to see the calculator before it is passed to another student. Make this a common practice; and this type of cheating will cease.

## Keeping Test Papers Covered

Students who fail to keep their test papers (and answers) hidden from the view of those around them are inadvertently or purposely contributing to cheating. Some students hold their test papers in a nearly vertical position rather than keep them down on the desk, so that their answers are easy targets for those behind them to copy.

Instructors should precede exams by telling students that they can only assume that the students are actively engaged in giving answers to others if papers are left uncovered. This may be a relief to some of the "social-passive" (7) students who feel peer pressure in making their answers available for those that are not well-prepared for the exam.

## Make-up Exams

Avoid giving exams at times other than the regularly scheduled examination time. Let your students know that giving exams at other times, either before or afterwards, leads to cheating, and that although you trust the group in general, you intend to take no chances.

Many instructors feel pressured into giving make-up exams. Students always have a variety of valid excuses for missing a scheduled exam. Some instructors give them identical exams because time does not permit preparing a different copy, and they take a chance on the honesty of the students to whom they give the make-up exam. Even the most honest student is subject to peer pressure, especially if he or she has been given the exam ahead of time.

Instructors need not give make-up exams (1), if they quiz frequently (4-5 times during the course). Also, the final exam can be counted double if an exam is missed. If the final is comprehensive, there will be questions on it relating to the subject matter that the student missed. More than one miss might be good reason for a tough oral exam.

## Handling the Confrontations

Many instructors avoid confrontations, either because they lack knowledge as to how to handle students that cheat, or they are afraid that they may have made a mistake in judgement. Some instructors go to the other extreme, confronting students in class, creating a very embarassing situation.

If the instructor doesn't have positive proof, then the confrontation should be avoided. Get the proof before causing unnecessary discomfort. Give out multiple test forms and make record of "mistakes which would have been correct on the alternate exam copy". Then present the evidence to the student in the privacy of your office.

In personal experiences, most students who are confronted with the evidence openly admit cheating. Most are very concerned about it; a few could care less. At the onset of the personal and private confrontation, ask the student to explain how he determined an answer. Some students will admit at that point that they copied. If they don't admit, ask them why they think they have been asked to visit with you. Then tell him frankly, that you suspect them of cheating. Don't ask them to confirm or deny your accusation. If you are certain of your changes, ask them why they cheated. They will be more likely to be more open with you and express their views. If they are innocent, they still have a chance to deny your accusations.

If cheated is admitted, make suggestions as to studying techniques so they will feel less need to cheat on future exams. Tell them that you do not tolerate any sort of cooperation on tests in your classes. Then give them a zero on the test—no exceptions! If you use the makeup procedure described earlier, they still have a chance of doing well in the course. Tell them that no one else knows about the episode, and that you can forget the incident if they give you good reason. Let them know that if it happens again either in your course or other courses, the college scholastic committee (or similar reviewing board) will be informed.

Don't tell them they will hurt themselves by cheating. If they have not been confronted before, they will certainly discredit that statement. Tell them that your course will lack credibility if you give them a passing grade, and the employer finds out how little they know concerning course content.

If they deny cheating and your proof is not as sound as you would like it to be, don't be afraid to apologize for what may have been a mistake in judgement, but let the student know that you want nothing else to occur in your classroom that might make you suspect them of such activities.

# CONCLUSIONS

Reducing the incidence of cheating depends largely on the willingness of the instructor to do something about it. Several methods are available to reducing cheating, some proven, some not. Cheating occurs, and nearly everyone is involved at some time or another.

Close supervision during the testing process brings good results, as does separation of students taking exams. Use of multiple test forms, avoidance of permitting make-up exams, insuring that exam papers are covered from view of others and active confrontation after proof of cheating has been established are other techniques that may prove useful in cheating control.

## LITERATURE CITED

- Anderson, W. F., Jr. 1957. Attitudes of university students toward cheating. J. Educ. Res. 50:581-588.
- 2. — . 1981. A simplified procedure for handling makeup exams. J. Agron. Educ. 10:17-19.
- 3. Boodish, H. M. 1962. The teacher's page: School vs. life. The Social Studies 53:149-153.
- 4. Brownell, H. C. 1928. Mental test traits of college cribbers. School and Society 27:764.
- 5. Bushway, A., and W. R. Nash. 1977. School cheating behavior. Rev. Educ. Res. 47(4):623-632.
- Gross, Sister M. M. 1946. The effect of certain types of motivation on the "honesty" of children. J. Educ. Res. 40:133-140.
- Hetherington, E. M., and S. E. Feldman. 1964. College cheating as a function of subject and situational variables. J. Educ. Psychol. 55:212–218.
- Houston, J. P. 1976. The assessment and prevention of answer copying on undergraduate multiple-choice examinations. Res. Higher Educ. 5(4):301-311.
- 9. Kelly, J. A., and L. Worell. 1978. Personality characteristics, parent behaviors, and sex of subject in relation to cheating. J. Res. Personality 12(2):179-188.
- Leming, J. S. 1978. Cheating behavior, situational influence, and moral development. J. Educ. Res. 71(4):214– 217.
- 11. Parr, E. W. 1936. The problem of student honesty. J. Higher Educ. 7:318-326.
- 12. Schab, Fred. 1969. Cheating in high school: differences between the sexes. J. Natl. Assoc. Women Deans and Counselors 33:39-42.
- 13. Vitro, F. T. 1971. The relationship of classroom dishonesty to perceived parental discipline. J. Coll. Student Personnel 12:427-429.
- 14. Zastrow, C. H. 1970. Cheating among college graduate students. J. Educ. Res. 64(4):157-160.