

## **Use of Electronic Devices in Classrooms**

### **Report by FSCOT**

After reviewing the recent literature on the use of electronic devices in academic classrooms, and reviewing the honor codes at several universities, it is apparent that there is concern about the use of electronic devices by students for purposes of academic dishonesty or cheating (Read 2004). However, the number of actual reported cases of electronic cheating remains small compared to the reported problems with plagiarism using the internet, unauthorized collaboration between students, and other forms of cheating. A review of the reported violations at K-State since 2002 appears to also substantiate this (KSU Honor Pledge Violations).

Students today own a variety of high-tech devices: cell phones (including camera phones and smart phones), hand-held computers and personal organizers (PDAs), programmable calculators, digital watches, pagers, and even miniature wireless video cameras (Richardson 2002). Unfortunately, some choose to use these devices in unethical ways to cheat in the classroom during exams. Information on these devices and methods of cheating are briefly discussed below. This information is summarized from the suggested readings given at the end of the paper, but the primary sources are Richardson and Lathrop.

### **Electronic Devices**

#### *Cell Phones*

Cell phone use is widespread across campuses. Many of the reported cases of cheating that involve electronic devices have involved cell phones (The Diamondback 2003). Besides use as a communication tool, many cell phones have more advanced capabilities such as internet access, instant messaging, and use as a calculator or camera.

#### *Programmable Calculators*

Beside the mathematical and scientific functions, hand-held calculators can be programmed with formulas, and actual text can be stored in the memory. These devices can essentially be used as electronic cheat sheets.

#### *Pagers*

Pagers can be preprogrammed with information that can be viewed on a small screen. Two-way pagers can send and receive information within a classroom or potentially elsewhere on campus. Pagers can be set on vibrate to announce an incoming message. Watch pagers can unobtrusively be worn as a watch or around the neck..

#### *Personal Data Assistant (PDAs)*

PDAs are minicomputers that fit in the palm of your hand. These devices have an enormous amount of storage space allowing students to store text documents, spreadsheets, databases, or graphics. Most also can be used as a calculator. Some now have instant messaging capabilities. Many of these devices are equipped with an infrared transmitter that allows text files or other information to be sent to another PDA.

#### *Headsets*

Students may ask to listen to music while taking an exam with the use of headsets. However, data can be recorded on a CD between songs or on one side and played back if needed.

#### *Video Cameras*

Miniature wireless video cameras can be used to video each page of an exam and transmit the image to another person outside the classroom

### **Conclusions from the literature**

The insights gained from various readings suggest that most academic institutions are dealing with the problem of electronic devices through the following means: Communication, information and awareness, policies and action by administrators and faculty, and technological solutions.

### *Communication*

There is a strong need for faculty and student interaction. Faculty must address the issue of academic integrity and communicate to students what is expected of them from the standpoint of ethical academic behavior. Faculty can reinforce this by specifically mentioning policies in the syllabus, in lectures, and prior to any exam.

### *Information and Awareness*

“Information is the best defense against high-tech cheating” (Lathrop 2000). Faculty must be aware of electronic devices that are available to students and aware of the capabilities of these devices. It might be advisable to have a faculty/student task force that meets once or twice a year on campus to review and discuss what’s new in electronic devices and how these devices are being used (Narita 2004).

### *Actions and Policies*

At most universities faculty continue to be free to make their own policies about what electronic devices, if any, are acceptable in their classrooms (Read 2004). Many have policies that bar any unnecessary electronic devices from exams.

Universities should revisit their honor codes and update them in response to technology. Universities also have the responsibility to increase awareness and understanding of academic integrity by offering information in written form as well as, verbal presentations to students (Narita 2004).

### *Technological Solutions*

Some universities are looking at technological solutions to shutting off wireless devices. However, this appears to be an expensive alternative and is not always effective.

## **Sample Honor Codes prohibiting electronic devices**

### **BERKELEY CAMPUS CODE OF STUDENT CONDUCT (University of California Berkeley)**

<http://students.berkeley.edu/sas/conduct.shtml>

#### III. B. 1. b.

Cheating is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials which are prohibited or inappropriate in the context of the academic assignment in question. This includes, but is not limited to:

b. Using notes, information, calculators, or other electronic devices or programs during exams or for assignments from which they have been expressly or implicitly prohibited.

### **2004-2005 Academic Policy (Seneca College)**

[http://www.senecac.on.ca/home/academic\\_policy/appe.html](http://www.senecac.on.ca/home/academic_policy/appe.html)

Appendix E 3. Cheating can further be defined as... Possessing unauthorized material or electronic devices during a test or exam.

### **Policy on Academic Integrity for Undergraduate and Graduate Students (Rutgers University)**

<http://teachx.rutgers.edu/integrity/policy.html#Cheating>

II. A. Cheating is the use of inappropriate and unacknowledged materials, information, or study aids in any academic exercise. The use of books, notes, calculators and conversation with others is restricted or forbidden in certain academic exercises. Their use in these cases constitutes cheating

## **References and Suggested Reading**

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