

**Catholic Library Association: K-8 Librarians  
and Technology Coordinators**

**Cyberethics, Cybersafety, and  
Cybersecurity (C3):  
Implications for the Classroom  
Teacher  
(Part 2)**

**University of Maryland**

**Educational Technology Policy, Research and Outreach  
Director: Davina Pruitt-Mentle**

## Cyberethics, Cybersafety, and Cybersecurity (C3)





## **Cyberethics: Promoting Responsible Use of Technology in the 21<sup>st</sup> Century Classroom**

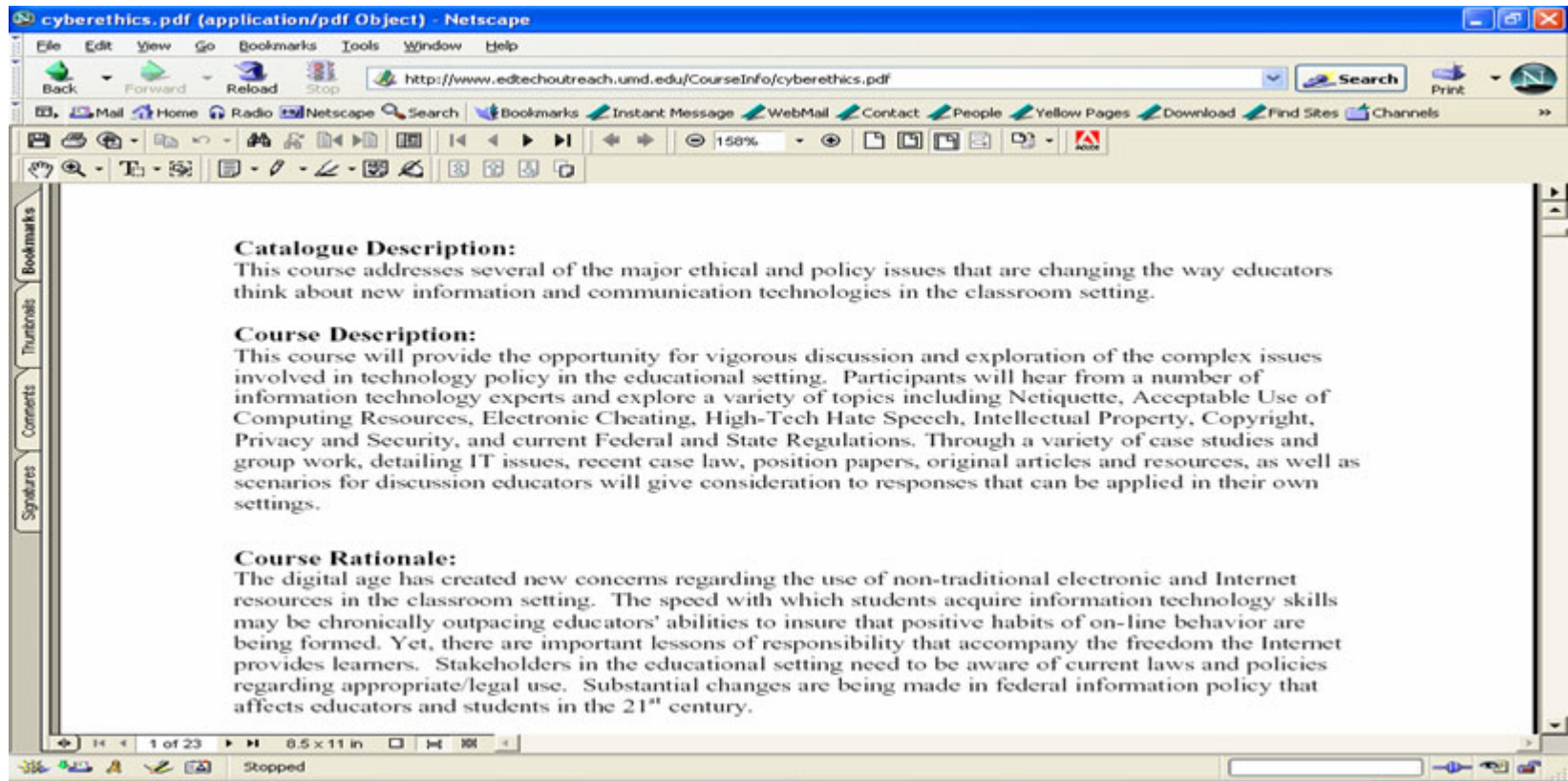


**Impact on the K-16 Classroom**  
**Davina Pruitt-Mentle**  
**January 14, 2003**





# Online 3 credit graduate course



## EDUC 473: Cyberethics for Educators: Ethical and Legal Implications for Classroom Technology





# April is Cyber- Awareness Month!




Educational Technology Outreach - College of Education - University of Maryland, College Park - Netscape

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 College of Education  
Educational Technology Outreach  
*Linking Research to Practice*

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## April is Cyberawareness Month!

Setting your clocks forward or back for Daylight Saving Time and replacing the batteries in smoke detectors are rituals repeated every spring and fall. Similarly, the **National Cyber Security Alliance** established April 4, 2004, as Cyber Security Day to raise awareness about Internet safety and computer security issues (**EDUCAUSE, 2004**). While colleges and universities across the country planned security education and awareness events to help promote Cyber Security Day, **Educational Technology Outreach** planned a month's worth of activities to help the K-20 community's awareness of cybersecurity issues and promote safe online practices.

- **Rutgers University** is encouraging its students, faculty, and staff to "Spring Ahead to Security!!" on a Web site devoted to National Cyber Security Day.
- **University of Maryland's Project Nethics and OIT** promoted "Spring Cleaning: Computers Need It Too!" through print and web based resources and a student awareness event.
- **The George Mason University IT Security Office** featured a week-long lineup of lunchtime presentations promoting cyber security awareness.
- **The University of Arizona** developed a series of humorous posters to reinforce messages that are designed to prevent identity theft and other consequences of improperly secured computers.
- The Office of Information Technologies at the University of Virginia has published on the topic of developing campus-wide security education and awareness in **EDUCAUSE Quarterly** [PDF - 57KB] and serves as part of the Virginia Alliance for Secure Computing and Networking (VASCAN) that has compiled a **collection of security tools and best practices** from Virginia universities.

First held in 2002, the semi-annual National Cyber Security Days are coordinated with daylight savings in April and October in the U.S. and are intended to raise the public's awareness of cybersecurity issues and promote safe online practices. Read on to find out more about National Cyber Security Day:





# April is Cyber- Awareness Month!



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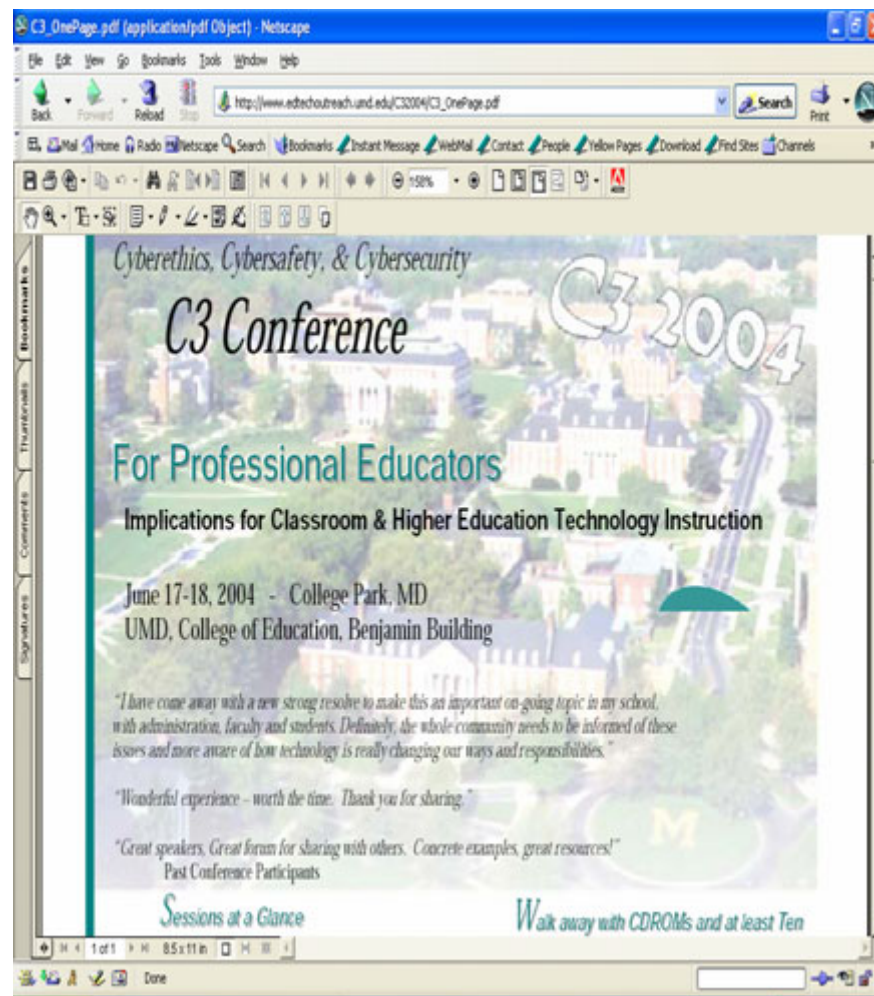
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<p><b>April is Cyber-Awareness Month!</b></p> <p>Click on a Day for Activity Details</p>				<p>1. Take the self-guided cyber security test</p>	<p>2. Use protection software "anti-virus software" and keep it up to date.</p>	<p>3. Don't open email from unknown sources.</p>
<p>4. Use hard-to-guess passwords.</p>	<p>5. Protect your computer from Internet intruders -- use "firewalls".</p>	<p>6. Don't share access to your computers with strangers. Learn about file sharing risks.</p>	<p>7. Disconnect from the Internet when not in use.</p>	<p>8. Back up your computer data.</p>	<p>9. Regularly download security protection update "patches".</p>	<p>10. Check your security on a regular basis. Reevaluate your computer security.</p>
<p>11 Make sure your family members and/or your employees know what to do if your computer becomes infected.</p>	<p>12 Visit Get Netsmart (best with Netscape) Teaching children what to watch out for when surfing the internet with fun and interactive games- but even adults can learn from this site</p>	<p>13 Visit the FTC website-offers tips for consumers and businesses on computer security and protecting personal information</p>	<p>14. Are you a Safe Cyber Surfer? Take our quiz to find out!</p>	<p>15. Learn more about how to protect your computer, your sensitive files and your home network from hackers and viruses by taking some basic precautions Video clips also included</p>	<p>16. Visit GetWise to learn more about how to Find, remove and prevent annoying spyware.</p>	<p>17. Visit GetWise to learn how to prevent unwanted email and spam</p>
<p>18. Learn about cookies, how they affect your privacy and how you can control them.</p>	<p>19. Learn to identify online fraud and prevent it.</p>	<p>20. Take a free home users beginner course on Security Fundamentals: Intro, Dangers/Defenses, Viruses, Passwords. and</p>	<p>21. Learn the Computer Security Jar</p>	<p>22. Read through the beginner's</p>	<p>23. Learn about DSL or cable</p>	<p>24. Learn more about home and</p>

See Handout

javascript:popup("cybermonth/april14.html")



# C3 Conference (June 17 & 18)





# More about Plagiarism



**This presentation is aimed at providing an overview of the current state of:**

- Plagiarism
- Strategies to Combat Electronic Plagiarism
- Internet Paper Mills
- Locating Electronic Paper Mills
- Detecting Plagiarized Work
- Tracking Down Suspicious Papers Electronically
- Other Resources





# Cybercheating in the 21st Century

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Cheating in school “has been around as long as organized education” (Chidley, 1997).

Chidley, Joe. "Tales Out of School: Cheating Has Long Been a Great Temptation, and the Internet Makes It Easier Than Ever." *Maclean's* Nov. 24, 1997:76-80. Full-text. Infotrac SearchBank: Expanded Academic Index. Online. Information Access. 11 Dec. 1998.



# What is Cheating or Plagiarism?

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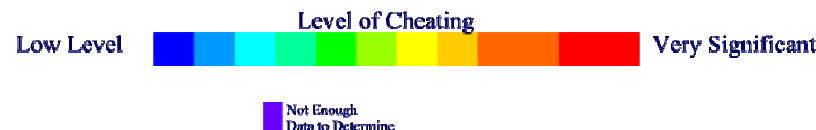
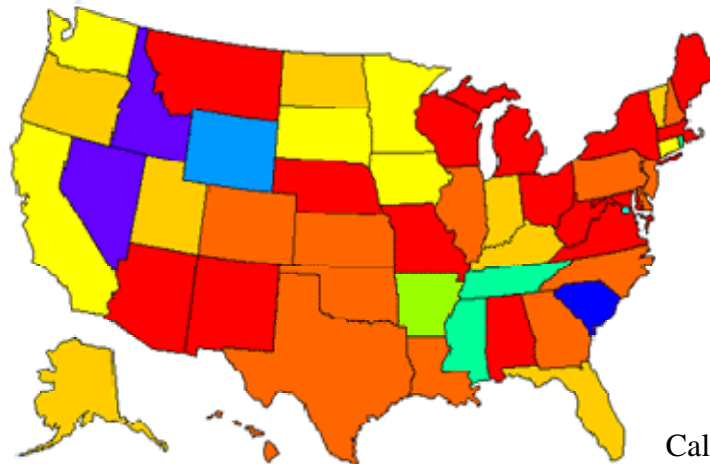


- Stephen Wilhoit lists the following types of plagiarism:
  - Buying a paper from a research service or term paper mill.
  - Turning in another student's work.
  - Turning in a paper a peer has written for the student.
  - Copying a paper from a source text without proper acknowledgment.
  - Copying materials from a source text, supplying proper documentation, but leaving out quotation marks.
  - Paraphrasing materials from a source text without appropriate documentation.

Wilhoit, Stephen. "Helping Students Avoid Plagiarism." *College Teaching* 42 (Fall 1994): 161-164. In Hinchliffe, Lisa. "Cut-and-Paste Plagiarism: Preventing, Detecting, and Tracking Online Plagiarism."  
<http://alexia.lis.uiuc.edu/~janicke/plagiary.htm>. 25 Feb. 1999.

# Current Statistics

## State by state levels of digital plagiarism, based on papers submitted to Turnitin.com



Calculations normalized based on the number of term papers analyzed from a particular state. Digital plagiarism is also growing at an alarming rate internationally, as is indicated by our many Turnitin.com subscribers overseas.

<http://www.plagiarism.org/problem.html>



# Statistics



- According to a 1998 survey by *Who's Who Among American High School Students*, four out of five college-bound high school students admit to cheating on schoolwork (~80%)
- In 2001, the same survey revealed 84%





# Statistics

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- *Center for Academic Integrity* study by Donald McCabe from Rutgers University, reports that 80 percent of **college students** admit to cheating at least once



# Center for Academic Integrity study: Student Cheating in American High Schools

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- **Survey conducted by Donald L. McCabe-Rutgers University**
  - Almost 4500 high school students completed a written survey in the 2000-2001 school year
  - These students represented 25 schools around the country - 14 public, 11 private
  - In class survey - 92% of students receiving surveys provided a useable response
  - 52% of respondents were in the 11th grade - 17% in 9th, 16% in 10th & 15% in 12<sup>th</sup>

Source: Center for Academic Integrity study: Student Cheating in American High Schools.  
Donald L. McCabe May 2001 <http://www.academicintegrity.org/>



# Major Conclusions

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- Cheating is widespread
- Students find it easy to rationalize cheating
- The Internet is raising new questions
- Students feel that many teachers ignore cheating, at least on occasion
- Students cheat for a variety of reasons

Source: Center for Academic Integrity study: Student Cheating in American High Schools. Donald L. McCabe May 2001 <http://www.academicintegrity.org>



# Cheating is Widespread

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- 74% of respondents reported one or more instances of serious test cheating
- 72% reported one or more instances of serious cheating on written work
- 97% report at least one questionable activity (from copying homework to test copying)
- More than 30% of respondents admit to repetitive, serious cheating on tests/exams

Source: Center for Academic Integrity study: Student Cheating in American High Schools. Donald L. McCabe May 2001 <http://www.academicintegrity.org>





# Plagiarism & The Internet

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- 15% have submitted a paper obtained in large part from a term paper mill or website
- 52% have copied a few sentences from a website without citing the source
- 90% of the students using the Internet to plagiarize have also plagiarized from written sources. (The Web has 'created' few new cheaters - 6% of all students.)

Source: Center for Academic Integrity study: Student Cheating in American High Schools. Donald L. McCabe May 2001 <http://www.academicintegrity.org>



# Some Teachers Ignore Cheating

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- 47% of students think teachers sometimes ignore cheating.
- The major reasons students think teachers ignore cheating are:
  - Don't want to deal with hassle (18%)
  - Don't care (11%)
  - Not worth trouble on small assignments (7%)

Source: Center for Academic Integrity study: Student Cheating in American High Schools. Donald L. McCabe May 2001

<http://www.academicintegrity.org>



# Why Students Cheat

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- Lazy/don't study/didn't prepare (32%)
- To pass/get good grades (29%)
- Pressures to succeed (12%)
- Don't know answers/understand (9%)
- Time pressure - too much work, etc. (5%)
- Other (13%)

Source: Center for Academic Integrity study: Student Cheating in American High Schools. Donald L. McCabe May 2001 <http://www.academicintegrity.org>



# Other Findings

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- Serious cheating is generally lower at private vs. public schools
- Students in midwest report lower levels of cheating than schools in west and northeast
- Few consistent differences by gender
- Serious test cheating grows from 9th to 11th grade and drops off slightly in 12th grade

Source: Center for Academic Integrity study: Student Cheating in American High Schools. Donald L. McCabe May 2001 <http://www.academicintegrity.org>





# Other Studies



- **2000 Josephson Institute of Ethics studies**
  - Nationwide survey of 8,600 high school students
  - Indicated 61% of students in 1992 admitted to cheating on exams
  - 71% in 2000 admitted to cheating on exams
- **58.3% of high school students let someone else copy their work in 1969, and 97.5% did so in 1989-**  
- The State of Americans: This Generation and the Next (Urie Bronfenbrenner, Editor).



# Still More Statistics



- **36% of undergraduates have admitted to plagiarizing written material--** Psychological Record survey (Roig M. Psychological Record 1997; 47: 113-122).
- **90% of students believe that cheaters are either never caught or have never been appropriately disciplined--** US News and World Report poll (1000 adults-over sample of 200 college students in October of 1999)
- **257 chief student affairs officers across the country believe that colleges and universities have not addressed the cheating problem adequately--** from a study by Ronald M. Aaron and Robert T. Georgia: Administrator Perceptions of Student Academic Dishonesty in Collegiate Institutions (2001).
- **30% of a large sampling of Berkeley students were recently caught plagiarizing directly from the Internet--**results of a Turnitin.com test, conducted from April-May 2000.



# Academic Dishonesty

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“Acts of academic dishonesty are on the rise at universities and Internet plagiarism is **in**” (Mary Clarke-Pearson, 2001).

Source: Download. Steal. Copy. Cheating at the University. Daily pennsylvanian.com. Nov. 27, 2001



# Current State of Cheating: Why is this happening?



- **Margaret Fain and Peggy Bates' 8 common themes:**
  - Honesty and integrity have very little to do with the "real" world or school work.
  - An "education" doesn't connect with "gaining knowledge on your own"
  - Students come to school to graduate - "get a diploma". How they get this credential might be less important than simply getting it.
  - Many students cheat or plagiarize to maintain high GPAs - there is tremendous pressure from parents, college admissions, and corporate recruiters
  - Some think it is no longer "socially unacceptable".
  - Many think that anything and everything on the Internet is public domain.
  - Many do not know what constitutes plagiarism--they have not learned about plagiarism in high school.
  - Some students actually engage in unethical behavior out of self-defense -students in their classes are using it to excel, creating unfair competition

Source: *Current State of Cheating* Teaching Effectiveness Seminar: Coastal Carolina University, March 5, 1999  
(Updated March 3, 2000, Revised March 26, 2001) Margaret Fain is Assistant Head of Public Services, and Peggy Bates is Reference Librarian at Kimbel Library, Coastal Carolina University, Conway, SC. <http://www.coastal.edu/library/papermil.htm>





# So if everyone is doing it why haven't more been caught?

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- **"Who wants to sit around looking for websites trying to find out if a paper is plagiarized or not... pretty soon you're a private investigator."**-- a Stanford University professor, from an article in TechWeb News.
- **"[Plagiarism] is one of those areas in the academy that no one wants to talk about and is often rewarded by not addressing actively."**-- an Associate VP of Student Life, as posted in The Chronicle of Higher Education's "Colloquy."
- **"Too few universities are willing to back up their professors when they catch students cheating, according to academic observers. The schools are simply not willing to expend the effort required to get to the bottom of cheating cases"**-- as stated by The National Center for Policy Analysis.

Source: <http://www.Turnitin.com>



# How Can We Help Prevent plagiarism ?

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- Be clear about cheating and plagiarism policies
  - **Define** what **plagiarism** is and isn't
  - Discuss plagiarism as a **moral and ethical issue**
  - Make students aware of what constitutes plagiarism, **polices** about the unethical behavior, and how **you** handle it.
  - Discuss as a legal issue of **fair use and intellectual property**. Students need to know and understand copyright and intellectual property laws rather than – “Don’t do it because I told you not to do it”.



# Present Examples

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- Talk about past cases
  - From your classes
  - Examples of legal cases
    - Universities
    - Work related
    - K12



# The Right Way

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- Discuss **copyright and the Internet.**
- **Model** how to document web pages
- Provide information on documenting materials from online sources
  - Show them how to **correctly cite electronic sources.**
  - Conduct **short activities and exercises** to practice
- Discuss the advantages and disadvantages **of the proper** use of electronic sources (up to date current news/need to check and verify sources)



# Preventing Plagiarism



- **Demonstrate** how easy it is to **check paper mills and internet sources**
- Have students do a **similar exercise** as we do today
  - Find if someone has plagiarized by using the web
  - Download a paper from one of the paper mill sites and have students analyze it to see that these sites produce poor quality work in many cases
- Assign **current and local topics**
- Assign an initial research “short paper” on the topic of **ethics**, cybercheating, or cyberethics
- Be **specific** about the paper
  - Not just general statement “ a paper on the Civil war”
  - Include how many pages for each section
- **Change topics** from semester to semester or from class to class





# Anti-plagiarism Activities



- Tie the topics into the **class experience**. Ask students to share their ideas for their paper as it is being written, rather than only at the end.
- Have writing assignments that have students **analyze classroom activities or discussions**, as well as, referenced sources
- Include a **section** in their paper that discusses their topic in light of what was covered in class.
- Ask students to **summarize main points** of their papers while in the research phase
  - As a warm up exercise
  - A quiz or part of a quiz
  - Bonus or extra credit points
  - Part of a test



# Focus on the Research Process

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- Structure the project so you **focus on** the process of writing.
- Allow **extended time** to work on the activity
  - Set up the project so that sections are worked on over the course of the semester.
  - Have different sections due at different times and provide feedback along the way.



# Extended Time



- **Ask for several of the following to be turned in:**
  - An abstract about what they plan to write about
  - Sketch of brainstorming session
  - A paper outline
  - Multiple drafts
  - A topic proposal for their paper
  - Multiple “new vocabulary” and annotated bibliographies with reading reflections
  - A bibliography that includes multiple sources and types of sources (i.e. 3 books, 2 journal articles and 4 websources).
  - Rough drafts and/or working notes.
  - All working drafts turned in with the final paper.



# Research is a Process

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- As part of the paper or as a separate assignment, have students reflect personally on the topic they are writing on or on the process of doing research and writing.
- Make sure students know that you read carefully the papers that are handed in.



# How To Detect Plagiarism

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- Being familiar with a **student's style** of writing, grammar, and vocabulary makes it easier to determine if they are the writer of the paper.
- A **shift** between plagiarized material and student work (**writing style**)
- **Unusual formatting** or formatting that does not match what you specified
- Website **printout page numbers or dates, grayed out letters** or unusual use of upper/lower case and capitalization.
- **Unexplained jargon** or advanced vocabulary and/or sentence structure.
- **Unable to explain** an obscure point



# Detecting Plagiarized Papers

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1. Writing style, language, vocabulary, tone, grammar, etc. is above or below what the student usually produces. It doesn't sound like the student.
2. Sections or sentences do not relate to the overall content of the paper. Students may "personalize" a paper by adding a paragraph that ties the paper to the class assignment.
3. Look for strange text at the top or bottom of printed pages.
4. Look for gray letters in the text, often an indication that the page was downloaded from the web, since color letters on a screen show up gray in a printout.



# Detecting Plagiarized Papers

5. Web addresses left at the top or bottom of the page. Many free essays have a tag line at the end of the essay that students often miss.
6. Strange or poor layout. Papers that have been downloaded and re-printed often have page numbers, headings, or spacing that just don't look right.
7. References to graphs, charts, or accompanying material that isn't there.
8. References to professors, classes or class numbers that are not taught at your school
9. Citations are to materials out of date, out of the country or not owned by your local (school) library





# Detecting Plagiarized Papers

10. Web sites listed in citations are inactive.
11. All citations are to materials that are older than five years.
12. References are made to historical persons or events in the current sense.
13. Students can not identify citations or provide copies of the cited material.
14. Students can not summarize the main points of the paper or answer questions about specific sections of the paper.
15. When provided with a page from their paper that has words or passages removed, students can not fill in the blanks with the missing words or with reasonable synonyms.