

**CAMPUS AWARENESS OF
CYBERSECURITY THREATS
AND ONLINE PRIVACY
ISSUES.**

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INTRODUCTIONS

- Paul Grieggs, IUP IT Security Manager, pmgriegg@iup.edu
- Theresa McDevitt, IUP Government Information/Outreach librarian. mcdevitt@iup.edu. Co-director for Reflective Practice Project of Center for Teaching Excellence

WHAT WE WILL DISCUSS

- Ways that college professors and other higher education student support professionals can help students increase awareness of cybersecurity threats and best practices in preserving privacy

WHAT DO THESE PLACES HAVE IN COMMON?

- University of Maryland
- North Dakota University
- Butler University
- Indiana University
- Arkansas State University

http://www.huffingtonpost.com/kyle-mccarthy/five-colleges-with-data-b_b_6474800.html

WHAT DOES IT SECURITY DO TO PREVENT HACKING?

- A full program of technical controls is necessary to maintain a secure environment.
- Technical controls include things such as:
 - ✓ Patch management program
 - ✓ Border firewalls to control access
 - ✓ Identity Management systems
- **These technical controls are necessary, but not enough.**

WEAKEST LINK?



SECURITY IS PARTICULARLY CHALLENGING FOR .EDU



WHY IS IT HARDER FOR .EDU?

BUSINESS

- Businesses can fire employees
- They can hold them accountable in important ways
- They have a relatively small population of stable employees
- They have more control of their training

.EDU

- Students are the customer
- We want to attract students with quality Wi-Fi, lots of technology, and ease of access to Internet
- We support student success so are reluctant to shut students off from the system for long
- Students ignore emails from administration
- Students live for social media
- Connect with students in different ways to better understand them and encourage them to take advantage of opportunities to increase awareness of privacy and security best practices

SURVEYS

- IUP's Academic Computing Advisory Committee does frequent surveys of student attitudes to improve service and better understand our students needs and wants

WHAT YOU MIGHT ASK?

11 - Do you feel like you know enough about online privacy best practices and cybersecurity threats that may impact your personal information and security to adequately protect yourself?

12 - Would you like more opportunities to learn about best practices that will protect your personal information and security that might be offered by IT Support or your professors?

13 - If you would like such opportunities, how would you like to see such educational programs delivered?

COURSE INCLUSION- IL COURSE

LIBRARIES AND PRIVACY



ALA American Library Association

American Library Association, Code of Ethics, excerpt:

III. We protect each library user's right to privacy and confidentiality with respect to information sought or received and resources consulted, borrowed, acquired, or transmitted.

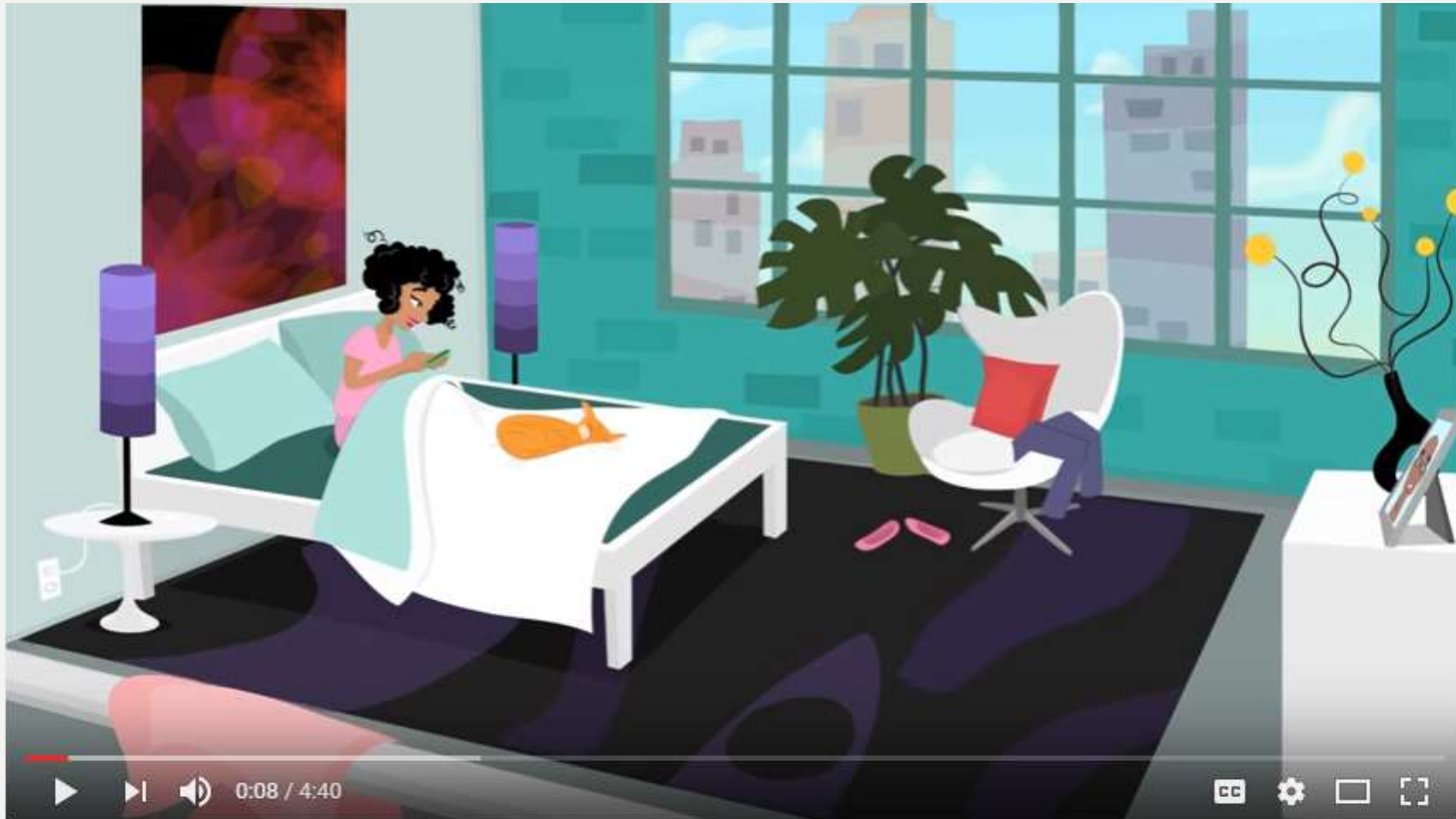
(ALA, 1995)



COURSE, TOPICS COVERED, AND METHODS USED

- LIBR 151 Introduction to Information Literacy.
- Information, the Internet, and You – Module Two
 - Students consider internet searching and information sharing online and:
 - the impact of those practices on their ability to easily locate the most reliable, accurate, and appropriate information
 - the impact on their privacy and possible risks associated with searching for information online.
 - how to improve their chances of finding the most relevant, reliable and authoritative information and practices that can help them stay private and safe when searching for and sharing information online

DATA COLLECTION



Hot on Your Trail: Privacy, Your Data, and Who Has Access to It

<https://www.youtube.com/watch?v=bqWuioPHhz0>

GOOGLE FILTER BUBBLE



<https://www.youtube.com/watch?v=p6vM4dhI9I8>

ENTERTAINING TO MAKE YOUR POINT



E-Safe: Phishing Emails - A Cartoon Short About The Dangers Of Phishing Emails

CARTOON INSTRUCTION

[HTTPS://YOUTU.BE/GTAPMZ_YBUS](https://youtu.be/GTAPMZ_YBUS)



JIMMY KIMMEL INTERVIEWS

[HTTPS://WWW.YOUTUBE.COM/WATCH?V=OPRMREFAI](https://www.youtube.com/watch?v=OPRMREFAI)

EDUCATIONAL VIDEOS AND GAMES

- Videos and games
 - Phishing Scams
 - The Case of the Cyber Criminal
 - Friend Finder



<https://www.consumer.ftc.gov/features/feature-0038-onguardonline#videos-amp-games>

SECURE CONNECTIONS: PUBLIC WI-FI

- <https://www.consumer.ftc.gov/media/video-0080-public-wi-fi-networks>



SOCIAL MEDIA

- Scenarios to highlight possible pitfalls and fuel discussion
 - <http://www.pewinternet.org/interactives/privacy-scenarios/>

Privacy and Information Sharing: Scenarios

Many Americans are in an “it depends” frame of mind when they think about disclosing personal information or keeping it private when considering different scenarios

% of adults who would find these different scenarios acceptable or not acceptable



Office surveillance cameras

Several co-workers of yours have recently had personal belongings stolen from your workplace, and the company is planning to install high-resolution security cameras that use facial recognition technology to help identify the thieves and make the workplace more secure. The footage would stay on file as long as the company wishes to retain it, and could be used to track various measures of employee attendance and performance. [Read more about this scenario.](#)



USE INTERACTIVE SURVEY/QUIZ TO START DISCUSSION

- Interactive Quizzes and Games
 - Review knowledge
 - Highlight important info
 - Realize what you know
 - Great way to begin discussion
 - Examples
 - Pew Study of adult knowledge <http://www.pewinternet.org/2017/03/22/what-the-public-knows-about-cybersecurity>
 - Online Privacy: An ACLU Quiz <http://privacyquiz.aclu.org/>
 - Privacy Jeopardy <https://jeopardylabs.com/play/gencyber-privacy-jeopardy>

OTHER COURSES

- Professional Studies professor discusses possible issues and how to ensure online image is positive
 - Google yourself and remove some personal information
 - Discuss privacy settings and consider other privacy issues
- Accounting professor
 - Discusses how top accounting firms guard against hacks
 - Discusses her experiences with hacking and employees who did not protect the company's data
- Criminology classes
 - Discuss cybersecurity laws
 - Discuss how law enforcement uses metadata from posted videos and images to catch criminals
 - Prosecutors in highly publicized cyanide poisoning case in Pittsburgh used emails and Google searches
- Business computing
 - Ransomware and how to avoid it or react to it if you become a victim

EXTRA CREDIT AND ORIENTATION OPPORTUNITIES

- Cybersecurity educational events
 - Cyber security awareness lecture/training by IT professionals
 - Free standing
 - Embedded in Technology Day sessions
 - NCSAM Events
 - Student poster contest
 - IT personnel outreach events in library lobby
 - Contest with short educational videos/five item check understanding quizzes (<http://libraryguides.lib.iup.edu/c.php?g=511835>) Prizes and extra credit
 - Information Assurance/Cybersecurity Day including teaching online privacy pedagogy panel
 - First year student orientation information
 - Beware of phishing
 - Malware and virus protection
 - Keep machines up to date
 - Technology Day Pedagogy Panels

COMMUNITY OUTREACH

- GenCyber summer camp
 - Graduate and undergrad students support instruction gain knowledge and skills
 - Culminating scavenger hunt based upon security principles
- Information Assurance/Cyber Security Day
 - Extra credit for students
 - Pedagogy panel with CTE support

SUMMARY

- Students benefit professionally and personally from using best practices in online privacy protection
- Faculty are including cybersecurity/online privacy topics in their classes
- .EDU IT benefits from faculty efforts to educate students in security best practices and should support faculty in developing course material and activities in these areas

Thank You!



REFERENCES

- [E-Safe Phishing Emails https://youtu.be/gTApnz_ybus](https://youtu.be/gTApnz_ybus)
- [5 Colleges With Data Breaches Larger Than Sony's in 2014 . http://www.huffingtonpost.com/kyle-mccarthy/five-colleges-with-data-b_b_6474800.html](http://www.huffingtonpost.com/kyle-mccarthy/five-colleges-with-data-b_b_6474800.html)
- Google Filter Bubble <https://www.youtube.com/watch?v=p6vM4dhI9I8>
- Hot on Your Trail <https://www.youtube.com/watch?v=bqWuioPHhz0>
- OnGuard Online
 - Videos and games <https://www.consumer.ftc.gov/features/feature-0038-onguardonline#videos-and-games>
- Online Privacy: Balancing Privacy with Access and Convenience <http://libraryguides.lib.iup.edu/c.php?g=511835>
- What is Your Password? <https://www.youtube.com/watch?v=opRMrEfAlil>
- What the Public Knows About Cybersecurity. Report and Quiz. <http://www.pewinternet.org/2017/03/22/what-the-public-knows-about-cybersecurity/>