

NOCCCD SECURITY AWARENESS TRAINING

Information Services
Spring 2021

1



Agenda

- Data Security and PII
- Laws, Policies, Guidelines
- Work From Home
- Malware
- Social Engineering
- Passwords

2

Data Security and PII

- NOCCCD collects and maintains personal identifiable information (PII) from students and employees
- Access and use of PII is governed by federal laws and regulation, plus NOCCCD Board policies.
- All District and campus employees are responsible for the security of PII
- Employees can be held liable for security breaches due to direct action or inaction

3

Federal Law and Regulations

PII data collected by NOCCCD is governed by federal laws:

- Family Education Rights and Privacy Act
 - More commonly known as **FERPA**
 - Protects privacy of student education records
 - Governs disclosure of student information
- Health Insurance Portability and Accountability Act
 - More commonly known as **HIPAA**
 - Guidelines for privacy and management of medical records

FERPA: <https://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html>

HIPAA: <https://www.hhs.gov/hipaa/index.html>

4

Board Policies

- AP 3720 – Computer and Electronic Communications Systems
- AP 3740 – Web Sites
- AP 3750 – Use of Copyright Material

For more information on the above board policies:

<https://www.nocccd.edu/policies-and-procedures>

Look under the *General Institution* heading.

5

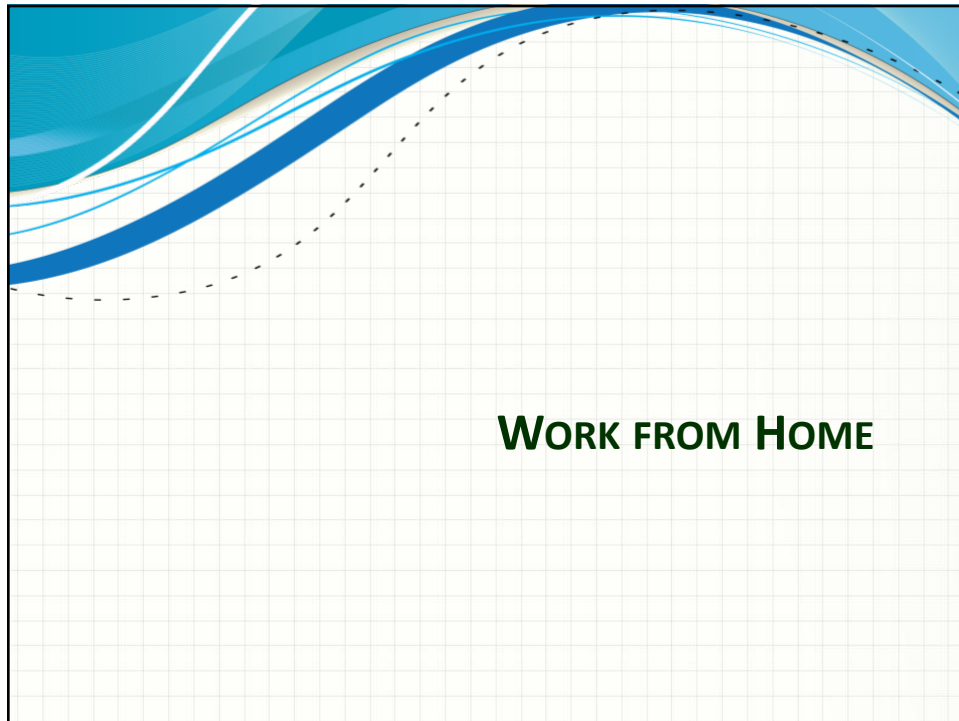
Approved Guidelines for Use

- Social Media
- Website
- Mobile Computing

For more information on the above guidelines:

<https://www.nocccd.edu/technology-coordinating-council>

6



7

Work Computer

- Working on a personal device?
 - Install security software and keep updated
 - Use cloud apps (O365) to access, create, save
- Ideal: Loaned PC/laptop from the office
 - Increased security, monitoring, troubleshooting
- Backup work data to cloud or external storage
- Network security best practices
 - Secure connection (VPN) to work server/system
 - Using WiFi? Connect with encryption (WPA2)
 - MFA (Multi-Factor Authorization)

8

Connected Devices

What are these?

- Computers, smartphones, tablets
- Smart home devices
- Guests (on guest network, where possible)

Basic Security Tips

- Keep all device software/firmware updated
- Enable auto-updating, where possible
- Use different passwords for each device

9

Family and Friends

- Add family and friends to appropriate WiFi network
- Do not let anyone access your work computer or devices

10

Work From Home Tips

Home Wireless (WiFi) Network

- Change default admin password on router
- Change SSID (name of WiFi network)
- Set to strongest WiFi encryption (WPA2)
- Utilize guest network feature
 - Guests
 - Most smart home devices



11

Mobile Devices Considerations


- Smartphone, tablets, laptops
- No technical support for personal devices
- Network use
 - Secured vs Unsecured Wireless
 - Work-related activity
- Responsible for any stored work-related data
- Delete all work-related data if no longer needed or leaving the District.

12



13

Malware



- What is Malware?
 - Short for *Malicious Software*
- Who designs/authors Malware?
 - Cybercriminals or Data Thieves
- What does Malware do?
 - Infiltrate (infect) a user's computer
 - Looks for and steals information
- How does Malware get into a computer?
- What are some examples of Malware?

14

Threat Vectors

Malware can get into a computer through various entry points or threat vectors:

- Internet
 - Compromised Web Sites (Drive By Download)
 - Downloaded Programs/Apps
 - Email and Phishing
 - Social media
- Network
 - Home or Office
 - Wireless (WiFi, Bluetooth)

Malware can also spread through physical connections between an external storage device and computer.

15

Anatomy of Malware



Malware is built combining two sets of code:

- The Mechanism
- The Payload

16

Anatomy of Malware

- Mechanism – Infiltrates computer/device
- Payload - Delivers the damage
 - Steals sensitive information
 - Modify/destroy data
 - Takes control of your computer
 - Monitors your actions

17

Common Malware Mechanisms

- Virus
 - Designed to infect on a single computer
 - Activates when infected file is accessed
 - Spreads by injecting itself into other files (infecting)
- Worm
 - Self replicating. No user interaction needed
 - Designed to spread across accessible networks
- Trojan Horse
 - Hidden in a legitimate app installed on a computer
 - Delivers payload when app is accessed

18

Common Malware Payloads

- Ransomware
 - Encrypts data on hard drive and locks computer
 - Requires payment to unencrypt and release
- Crypto Mining
 - Uses your computer/device to mine (earn) cryptocurrency
 - Infects desktop, mobile, smart home devices
- Backdoor
 - Creates opening for remote access
 - Gains control of computer for unauthorized actions
- Spyware
 - Tracks your computer/Internet activity
 - Reports activity to creator

19

Social Engineering

- What is this?
 - Fools people into giving up confidential information
 - Today's version of a scam, fraud, or con job
- Phone Conversations
 - Suspicious questions or behavior
 - Requesting confidential information
- In Person (service workers)
- Email
- Social Media

20

Email Threats

- Attachments
 - Confirm with sender if attachment not expected
 - Delete if sender is unknown
 - Malware can also hide in MS Office files and PDFs
 - Be careful if attached file requests access to run code
- Phishing Attacks
 - Know the classic signs (Review Handout)
 - Look before you click on links
 - Never provide personal, financial, login information
 - Can also trigger a malware attack

Important: Contact your campus ACT or our Help Desk if you are suspicious about an email you received.

21

Phishing Site Example (Chancellor)

The image shows a sequence of two screenshots from a phishing site. The top screenshot displays a Microsoft Office document viewer interface with a 'Download File' button. A red arrow points from this button to a login box that appears after clicking. The login box has fields for 'Email Id' and 'Password' and an 'Extract Shared Document' button. The background of the login box is a blurred Microsoft Word document.

- Fake (but official looking) Microsoft Office Apps document
- Clicking *Download File* button displays phishing login box

22

Social Media

- Are you concerned about privacy?
 - Personal Profile
 - Posts, Pictures, etc.
 - Passwords often contain personal info
- Who is watching your activity?
 - Review Audience
 - Take time to look at available settings
- Avoid potentially dangerous links
 - Preys on emotion with “hot button” topics
 - Often leads to hacked websites or phishing
 - Do some research!

23



PASSWORDS

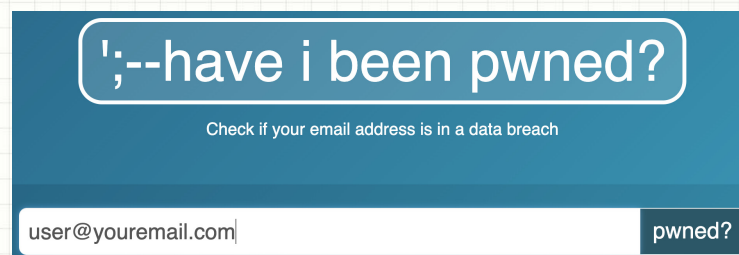
24

Passwords

- First and last line of defense to your data
- How passwords are stolen:
 - Phishing attacks
 - Repeating passwords from other logins
 - Guessed using personal information
 - Commonly used or weak password
 - Spyware (keyloggers)
 - Written down and stored in physical location
 - Unrelated data breach

25

Data Breach



';--have i been pwned?

Check if your email address is in a data breach

user@youremail.com pwned?

<https://haveibeenpwned.com/>

- Personal data may have been stolen
- In most cases, you were not notified
- Check your email addresses
- Consider password changes based on results

26

Weak Passwords

- Less than 8 characters in length
- Single Word
 - Common English/Foreign
 - Proper Nouns
- Personal Information
 - Family, spouse/significant other, pets, co-workers
 - Address/Zip, phone
- Format
 - Words followed by number
 - Sequential patterns
 - Keyboard (qwerty, asdf, zaq1, etc)
 - Characters or numbers (abcd, 1234, etc)

27

Top 25 Worst Passwords

- | | |
|----------------|----------------|
| 1. 123456 | 14. iloveyou |
| 2. 123456789 | 15. 1234 |
| 3. qwerty | 16. 1q2w3e4r5t |
| 4. password | 17. qwertyuiop |
| 5. 111111 | 18. 123 |
| 6. 12345678 | 19. monkey |
| 7. abc123 | 20. dragon |
| 8. 1234567 | 21. 123456a |
| 9. password1 | 22. 654321 |
| 10. 12345 | 23. 123321 |
| 11. 1234567890 | 24. 666666 |
| 12. 123123 | 25. 1qaz2wsx |
| 13. 000000 | |

28

Strong Passwords

- At least 10 characters in length on all systems
- Not the same as the user ID
- Contains a passphrase (ohmyistubbedmytoe)
- Does not contain:
 - Word or number patterns
 - Enumeration from previous (apple to apple1)
 - Contain personal information
 - Less than 3 words, if using passphrase method

29

Password Protection Standards

- ✓ Do not reveal passwords over the phone or through electronic communication means
- ✓ Do not request a person's password
- ✓ Do not reveal password to co-worker, manager, subordinate, assistant
- ✓ Do not reveal password to friends or family
- ✓ Do not talk about passwords in front of others
- ✓ Do not hint at the format of passwords

30

Password Protection Standards

- ✓ Use a unique password for each system
- ✓ Do not use “Remember my password” feature of applications
- ✓ Do not write down passwords and store anywhere in the office
- ✓ Do not store passwords in an unencrypted file on any computer or information system
- ✓ Consider using a password manager
- ✓ If available, using MFA is recommended

31

Multi-Factor Authorization (MFA)

- Secondary login factor
- Something physical that only you possess:
 - Smartphone
 - Authorization App
 - Text message
 - Phone call
 - Security Key
 - Most often inserted into device for authorization
 - USB-A, USB-C, Lightning, NFC (for smartphones)

32

Data Security Is Your Responsibility

- Be familiar with laws and District policies
- Review/strengthen home network security
- Be aware of issues when mixing work with personal on your PC or other devices
- Know the signs of phishing and fake links
- Create strong passwords for every system
- Consider additional security measures
- See something, say something!

33

Questions?

34

Contact Information

Web Page

<https://www.nocccd.edu/user-supporthelp-desk>

Downloadable Training Material

<https://www.nocccd.edu/training-and-training-materials>

District Help Desk for Banner Issues

Email Address

ishelpdesk@nocccd.edu

Phone Number

(714) 808-4849

Email Phishing Attack Examples

Here is an example of an email phishing attack detected by District IS staff members. The email is allegedly from Netflix, the well-known streaming service. The email is cloned from an actual Netflix communication, but with the message replaced for the phishing attack.

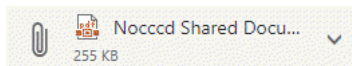
The phishing email was easily detected by the District IS Security team due to a variety of signs that are common to this type of attack. Take a look at the screenshot below of the phishing email. The common signs are highlighted, with explanations provided below the screenshot.



1	Email address does not match sender. Also note the punctuation in the subject line.
2	Not the American spelling of the word
3	Displayed link and the actual destination link do not match
4	Not a valid phone number in the United States
5	Extra characters displayed
6	Not a valid phone number in the United States. Number also differs from the message.
7	Contact information displayed is in a foreign country (The Netherlands)

This phishing attack, allegedly from our Chancellor, Dr. Marshall, was sent to a number of employees across the district in another attempt to steal information. Fortunately, the phishing email was detected immediately and the attack successfully contained shortly thereafter with no theft of sensitive data.

FW: REVISED AND UPDATED INFORMATION FOR ALL NORTH ORANGE COUNTY COMMUNITY COLLEGE DISTRICT EMPLOYEE



From: Leach, Heidi (Cancer Ctr) [mailto:LeachHeidi@centracare.com]
Sent: Tuesday, February 13, 2018 8:30 AM
Subject: FW: REVISED AND UPDATED INFORMATION FOR ALL NORTH ORANGE COUNTY COMMUNITY COLLEGE DISTRICT EMPLOYEE



FROM THE OFFICE OF THE CHANCELLOR THE NORTH ORANGE COUNTY COMMUNITY COLLEGE DISTRICT

Dear Colleagues

We all share the aim of providing people with innovative solutions that improve their quality of life. We can only succeed in this if we have society's trust. That trust is something we have to earn each and every day. This applies equally to everyone within The North Orange County Community College District – to employees as well as to the Board of Management. What that means for each of us is that our actions must also be based on laws, internal policies, voluntary commitments and ethical principles. Illegal transactions and activities are therefore unacceptable – everywhere in the world and without exception. Our LIFE values also reflect this.

They make it clear that integrity is one of the key elements of our corporate culture and provide the ground rules we must abide by in all we do. The aim of this compliance policy is to help you to follow The North Orange County Community College District principles of business conduct. However, it is not enough to simply take note of them; what matters is that we take these compliance principles to heart and, above all, that we live by them; that applying these principles becomes second nature to us.

This policy also helps us to monitor our own actions and tells us to whom we should turn whenever we are faced with questions regarding compliance. I would particularly like to emphasize that, to me, this is not simply a question of formal compliance with legal requirements, rules and regulations, or avoiding possible penalties. What counts is that each of us is truly convinced of the importance of always acting in accordance with these principles. Let us work together to successfully develop solutions that people trust, because that is precisely what matters.

Note: It is important that all employees download the attach document

Cheryl Marshall | Chancellor
NORTH ORANGE COUNTY COMMUNITY COLLEGE DISTRICT
 1830 W. Romneya Drive
 Anaheim, CA 92801-1819
 Phone: (714) 808-4500
 nocccd.edu

Confidentiality Notice: This e-mail and any attachment may contain confidential information that is legally privileged. This information is intended only for the use of the individual or entity named above. The authorized recipient of this information is prohibited from disclosing this information to any other party unless required to do so by law or regulation. If you are not the intended recipient, you are hereby notified any disclosure, copying, distribution or action taken in reliance on the contents of these documents is strictly prohibited. If you have received this transmission in error, please notify the sender immediately, reply to this transmission, or contact the CentraCare Health Information Systems Network Security staff by calling the IS Help Desk for assistance at (320) 251-2700 ext. 54540 and delete these documents.

1	Suspicious attachment (generic file name)
2	Email address doesn't match sender (Dr. Marshall at NOCCCD)
3	Terminology in the text is not used within our District
4	Text font suddenly changes
5	Contact information is not correct in some places
6	Legal statement and contact information does not match sender (NOCCCD)

Below are several recent examples of spear phishing, another type of phishing attack targeted at a specific individual, business, or organization. These examples are the ones you will most likely encounter.

From: Greg Schulz [<mailto:dean@executivemail.org>]
Sent: Monday, June 10, 2019 11:13 AM
To: [REDACTED]
Subject: Hello [REDACTED]

Can you confirm if you are in the Office.

Greg Schulz
Dean
Fullerton College

Email address and listed position (email signature) does not match sender.

From: [REDACTED]
Sent: Monday, June 10, 2019 12:36 PM
Subject: Pending Message(s)



Fullerton College
Excellence. Elevated.

<https://hlfh9rwypxziaa.appspot.com/dstwe/> has shared a file with you.
Click or tap to follow link.

[View](#)

Have a great day!

Pointing at hyperlink reveals a destination address not consistent with Fullerton College.

From: Arturo Ocampo <nadavzai@inter.net.il>
Sent: Wednesday, July 24, 2019 5:48 AM
To: [REDACTED]
Subject: Change request

Good Morning [REDACTED]

I need to change my banking information on payroll, are there any forms I need to fill for this purpose? I will appreciate you getting back to me on this

Thanks,

Arturo E. Ocampo, JD
DISTRICT DIRECTOR FOR DIVERSITY AND COMPLIANCE

Email address does not match sender. Finance-related requests are common in phishing attacks.

From: Lance Ponte <lponte@noccd.com>
Sent: Thursday, November 19, 2020 9:31 AM
To: [REDACTED]
Subject: New Internal Site Please Try

1

Hey Cattien - This is lance, the IT project Leader and we are testing our new login process for a new site which goes through our on prem OWA site. Can you please give it a quick shot and try and login with your Email and normal password. Please copy and paste the link below in your browser and let me know if it works.

noccd.com/?rid=GdpZB7L

2

Thanks

Thank You
Lance Aponte
IT Project Leader
1830 W Romneya Dr, Anaheim, CA 92801
P 714-808-4788

3

Email address doesn't match sender. Look at NOCCCD address for sender and hyperlink. Contact info is inaccurate.

From: Cheryl Marshall <our4pay@icloud.com>
Sent: Sunday, January 17, 2021 5:11 PM
Subject: Re:



I need your assistance!

Dr. Marshall

Sent from iPad

Note: This e-mail contains PRIVILEGED and CONFIDENTIAL information intended only for the use of the specific individual or entity named above. If you or your employer is not the intended recipient of this e-mail or employee or agent responsible for delivering it to the intended recipient, you are hereby notified that any unauthorized drivers dissemination or copying of this e-mail or the information contained in it is strictly prohibited. If you have received this transmission in error, please immediately notify the person named above at once by telephone and delete the message. Thank you.

Email address doesn't match sender. Dr. Marshall has a district address.

From: [Ingram, Anita](#)
Sent: Wednesday, May 12, 2021 3:13 PM
To: COVID-19@Support.com
Subject: Re: COVID-19 Benefits

In response to the current hardship in the community due to the COVID-19 pandemic, The Employee Assistance Program (E.A.P) has decided to support employees to get through these hard times.

The Employee Assistance Program will award \$2,500 to all qualifying employees COVID-19 support, starting from today, **Wednesday, 12 May 2021.**

Visit the [Covid-19 Benefits](#) page and fill in the form correctly with the most appropriate details to register.

Note: this support program is for [qualifying employees](#). All the information requested is required for your application to be processed.

Original URL:
<https://sitebuilder131201.dynadot.com/>
Click to follow link.

Sincerely,

Ingram Anita
Employee Assistance Program.
COVID-19 Support.