INCITING THE IMAGINATION

How we can help students see their future in cybersecurity



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Opinions are my own & do not represent my employer.

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THIS TALK IS FOR YOU IF:

- You are a mentor
- You lead a team
- You want to see how imagination can be applied to develop the next generation of cybersecurity professionals.

2018

Taft IT High School is launching what Cincinnati Public Schools believes is the first-in-the-country cybersecurity certificate program.

WVXU

https://bit.ly/2Z4BWSY

THIS IS NOT OUR SECURITY OPERATIONS CENTER



What is Imagination?



The ability to form mental sensory experiences that are not generated by perception. Also the process of making meaning, creating narratives or comparing concepts or objects.

8 TYPES OF IMAGINATION



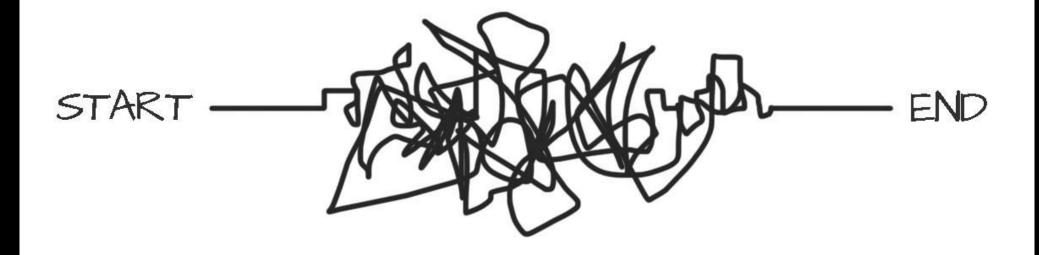


https://teachthought.com/learning/8-types-of-imagination/



CREATIVITY

THE CREATIVE PROCESS



THEORIZING

I Have A Theory That Donald Glover And Childish Gambino Are Secretly The Same Person





FANTASY



EMPATHY

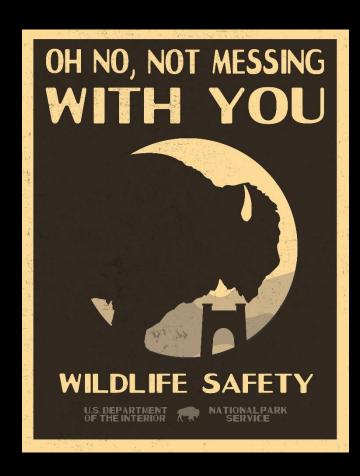


STRATEGY

you don't need to use the correct meme if nobody found out



SOFT SKILLS





DREAMS



MEMORIES





IMAGINATION IN ACTION

- We encouraged job shadowing.
- We built individual education plans.
- We gave them many hands on activities.
- We showed them our phishing workflow and got them involved.
- We dialogued through the analytical process.
- We included them in our tabletop exercises.

MORE IDEAS:

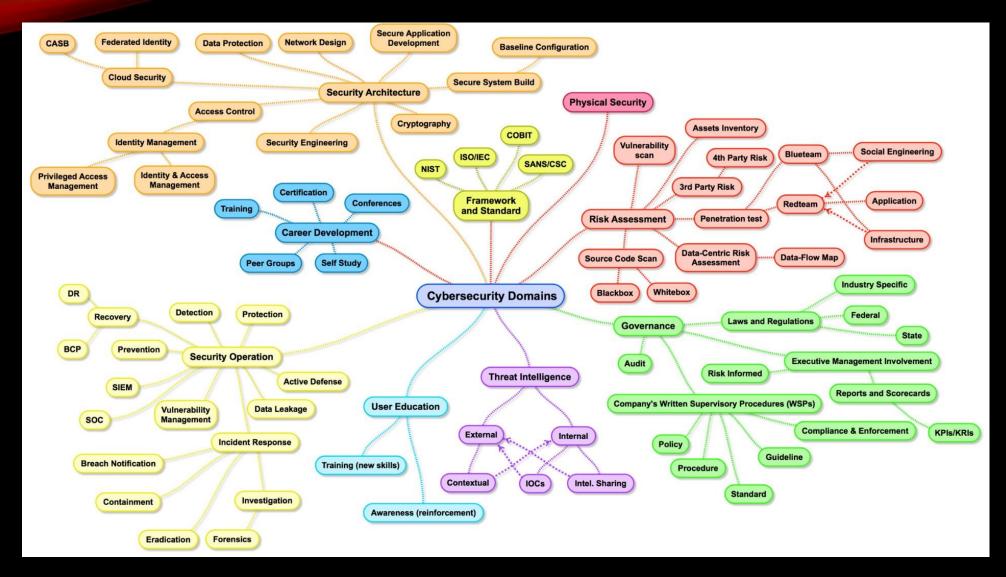
- Volunteer
- Attend Conferences
- Compete in CTFs
- Practice in Cyber ranges

Information security / Hacking for noobs

• https://github.com/tkisason/getting-started-in-infosec

Conference list 2020

https://docs.google.com/spreadsheets/d/1SdJwWAwutrlKfh4o3c2o9hH81zB1e3gNS2StoBoqApU/htmlview#gid=0

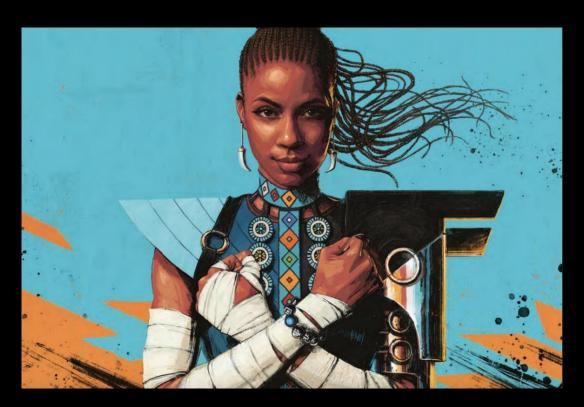


https://www.linkedin.com/pulse/map-cybersecurity-domains-version-20-henry-jiang-ciso-cissp/

LEARN HOW THEY LEARN

- Shadowing
- Working with a mentor
- Building a lab
- Watching videos
- Taking something apart
- Studying for certifications
- Following a "To Learn List"

INCITE THE IMAGINATION



• Incite: To move to action.

"Students told us how much they like the program even though they didn't even really know what they were getting into when it started off but now they are learning a lot more than they thought they could,"

Journal-News

https://bit.ly/2zHh4Go

OF THE NEXT GENERATION SO THAT THEY CAN SEE THEIR FUTURE DIFFERENTLY



HOW TO GROW IMAGINATION

- Do something boring
- Read fiction
- Watch fantasy movies
- Listen to music without lyrics
- Journal
- Have stimulating conversations
- Ask questions
- Vary routines
- Embrace chaos
- Be uncomfortable



Minority representation within the cybersecurity field (26%) is slightly higher than the overall U.S. minority workforce (21%).

ISC₂

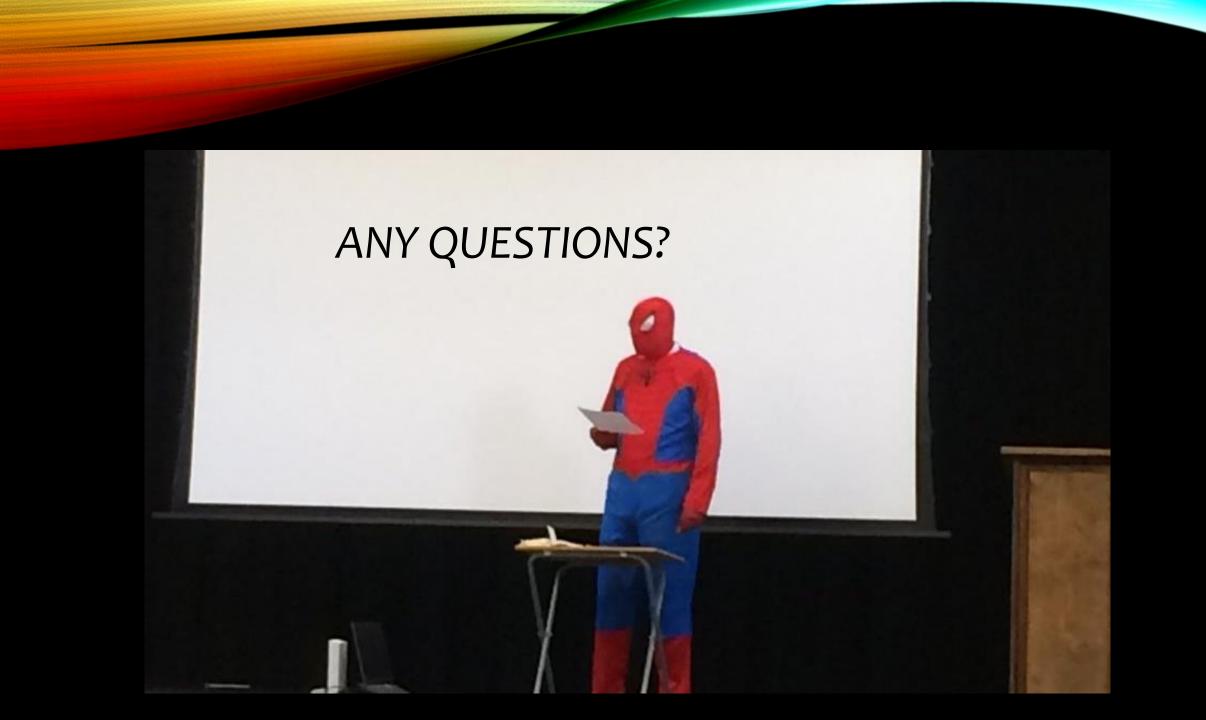
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REPRESENTATION



IMAGINE
AND
TAKE
ACTION







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