



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:

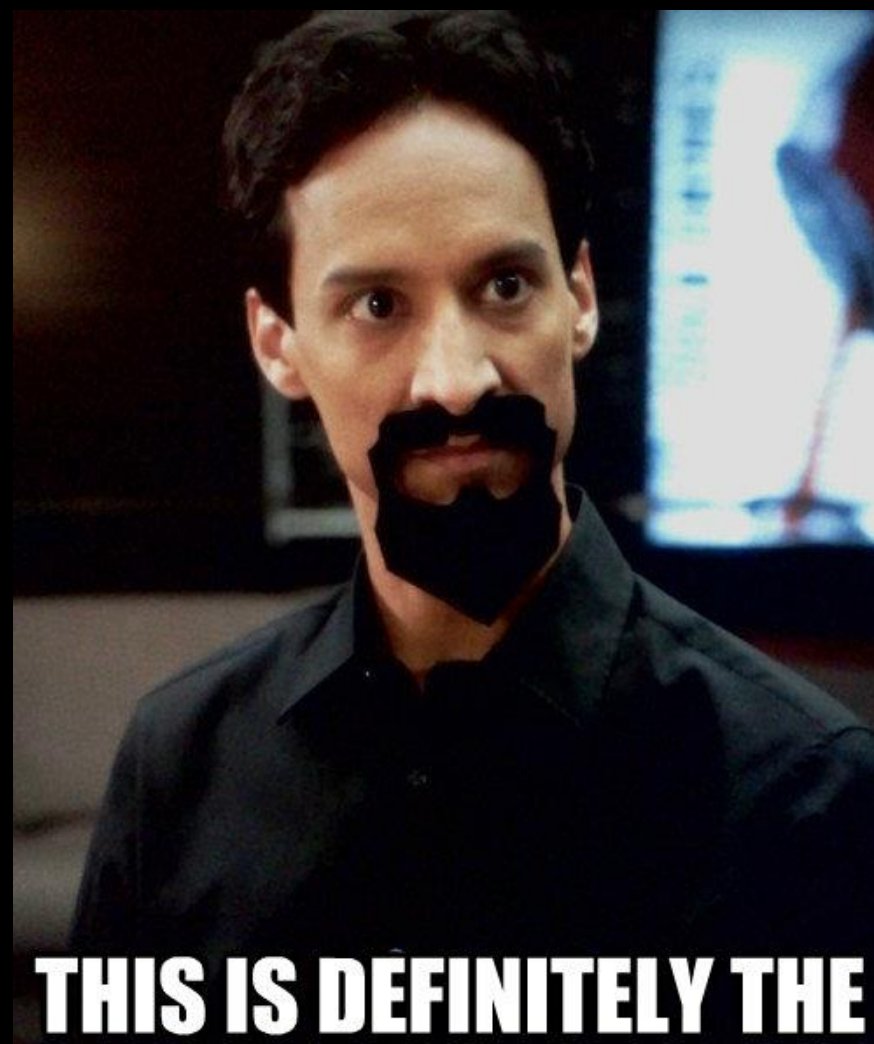


- You want to see how imagination can be applied to develop the next generation of cybersecurity professionals.




HOW DID I GET HERE?

ALIENS



**THIS IS DEFINITELY THE
DARKEST TIMELINE**



YOU'RE ABOUT
TO HACK TIME,
ARE YOU SURE?

YES NO

DISCLAIMER:

- This presentation is based on my observations and will help you with bringing more people into information security.

2018

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



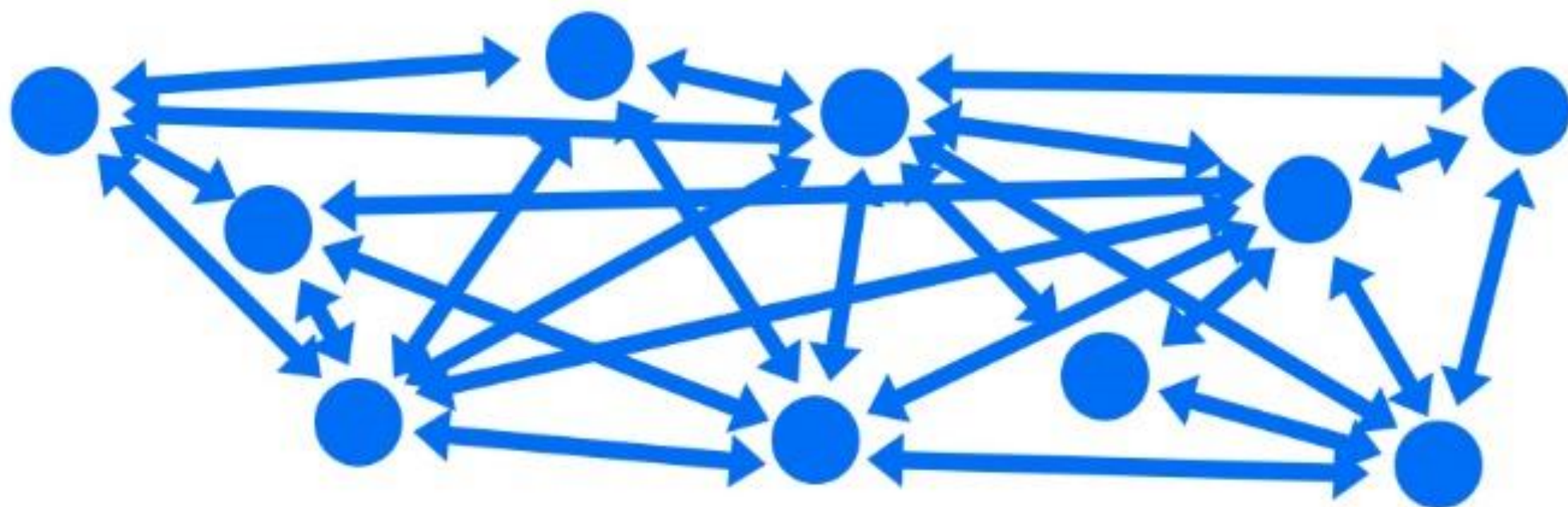
WVXU

<https://bit.ly/2Z4BWSY>

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.





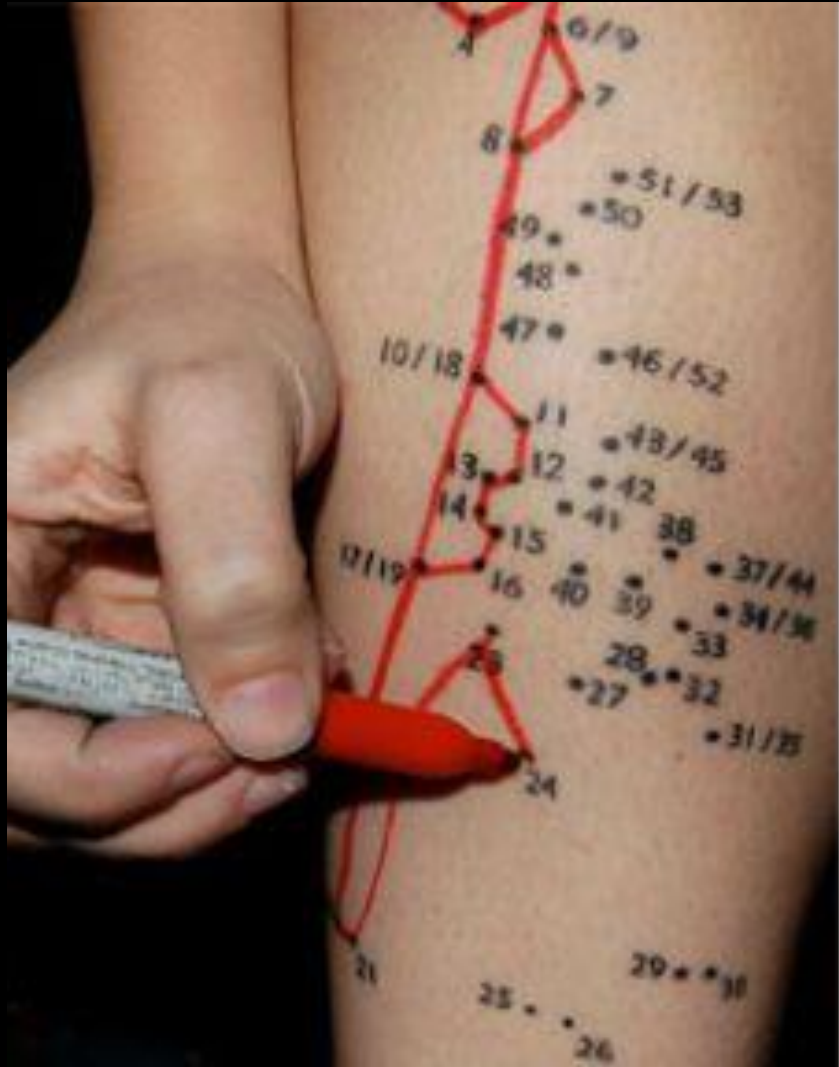


IMAGINATION AND CYBERSECURITY



THE CREATIVE PROCESS

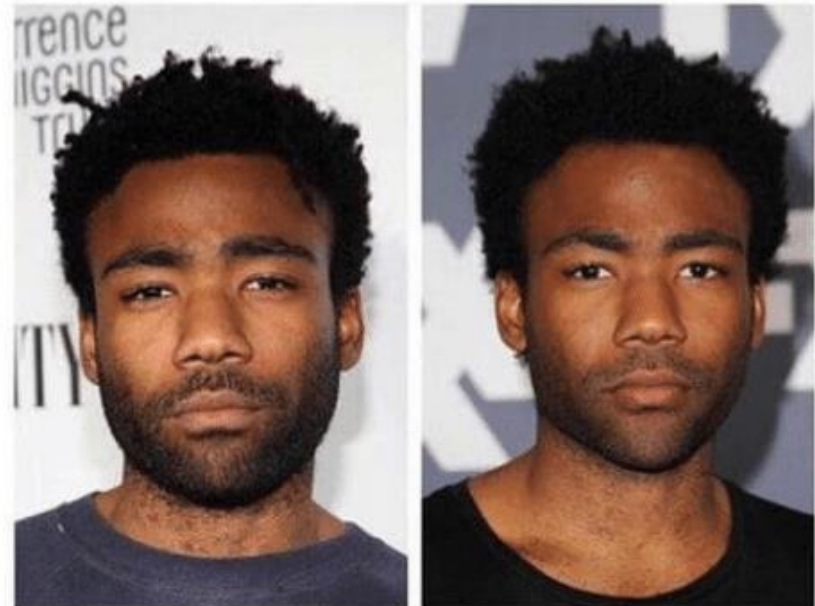




CREATIVITY

THEORIZING

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



FANTASY



I'M HERE TO LISTEN.



EMPATHY

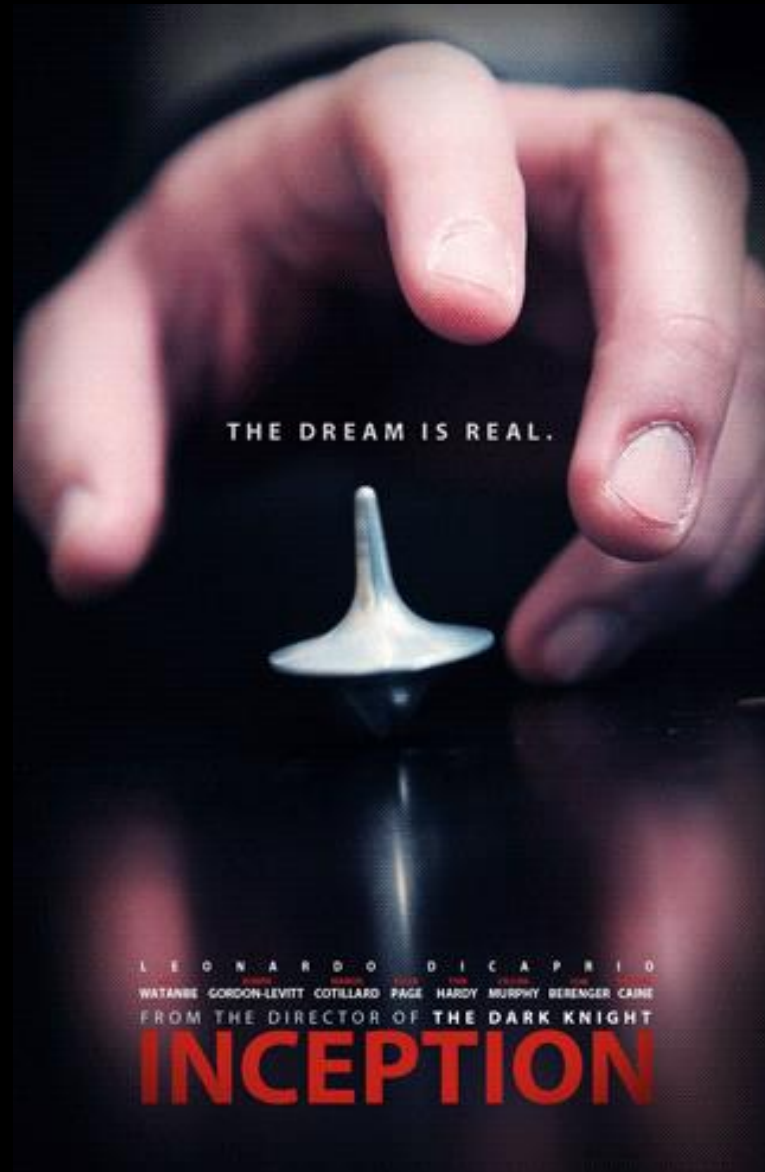
STRATEGY

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

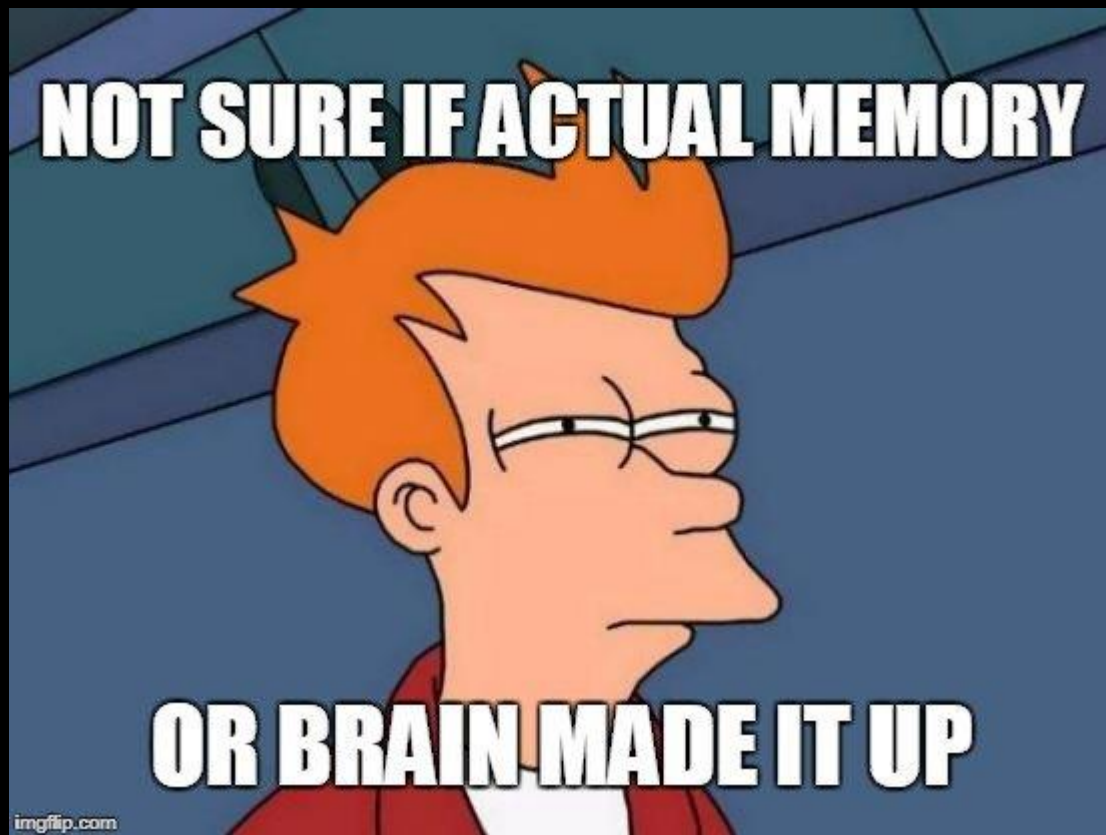


SOFT SKILLS





DREAMS



MEMORIES



IMAGINATION PITFALLS



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.



LEARN HOW THEY LEARN

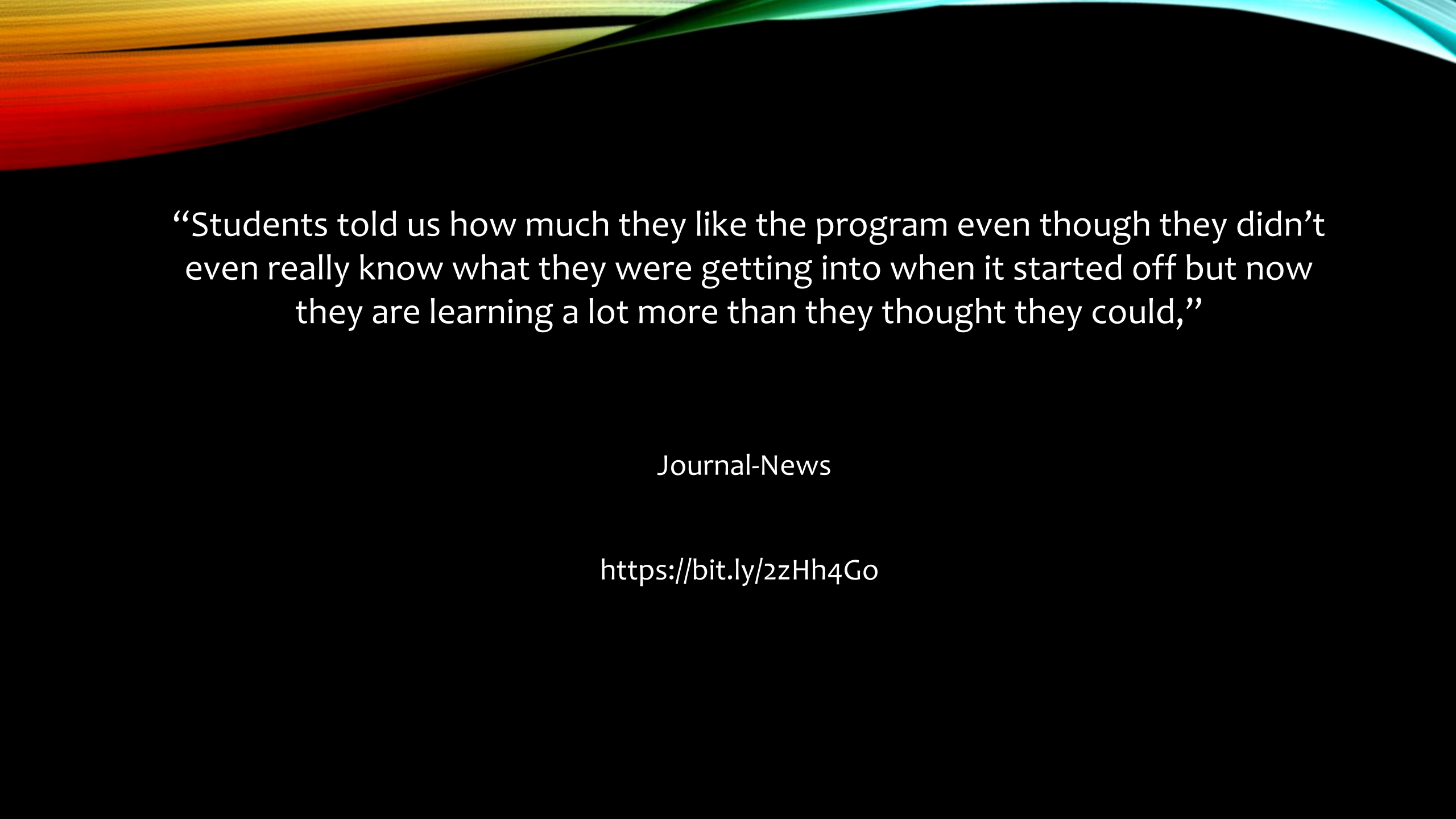
- Shadowing
- Working with a mentor
- Building a lab
- Watching videos
- Taking something apart
- Studying for certifications
- Following a “To Learn List”



INCITE THE IMAGINATION



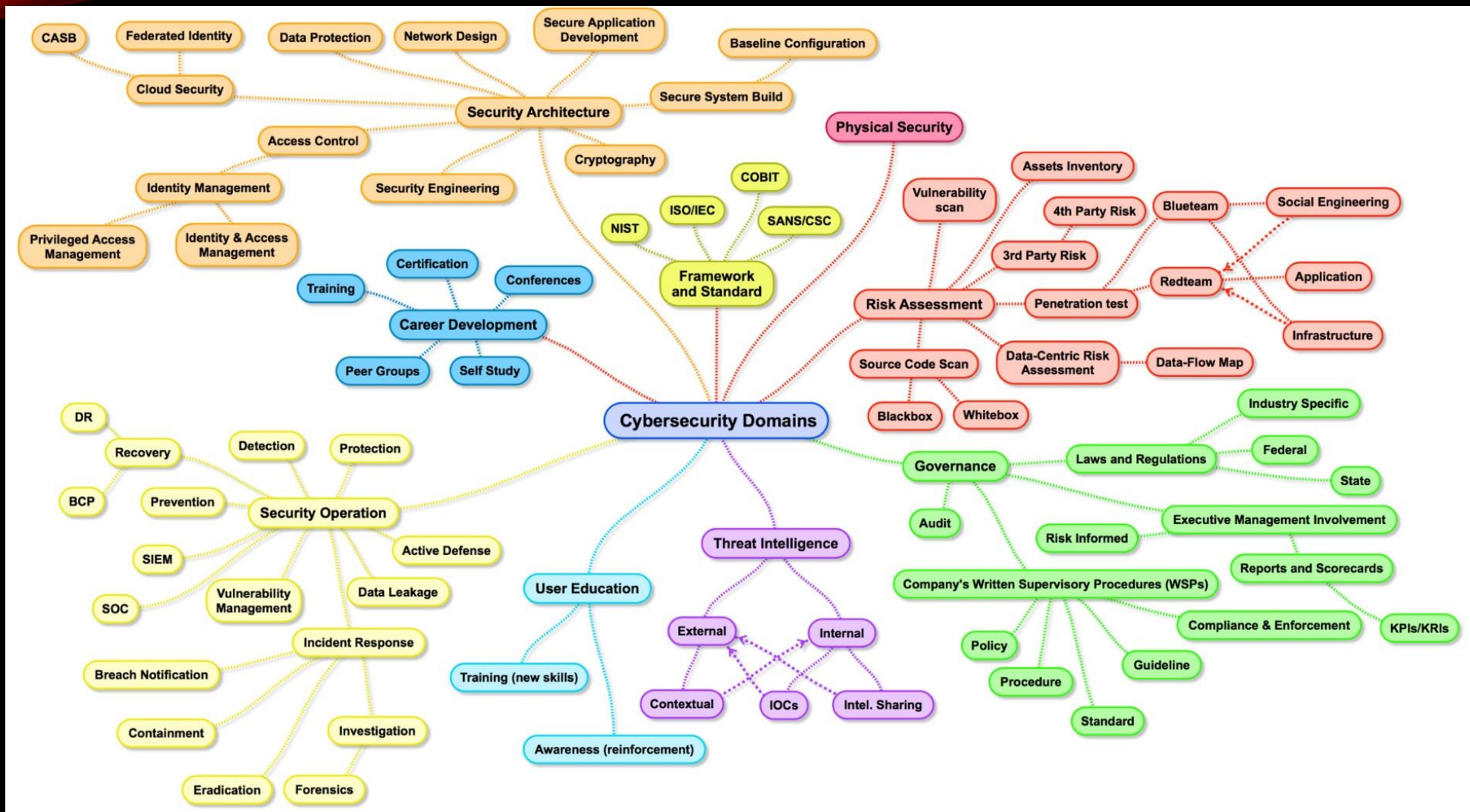
- Incite: To move to action.



“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>



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

INCITE THE IMAGINATION
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



IMAGINATION AND REPRESENTATION

Fact #301



FactRepublic.com

Mae Jemison, the first female African-American astronaut, was inspired to apply to NASA by the Star Trek character, Lieutenant Uhura. Jemison later went on to make a cameo appearance in Star Trek: The Next Generation.

IF YOU ARE JUST GETTING STARTED:

- Watch videos
 - Attend Conferences
 - Compete in CTFs
 - Practice in Cyber ranges
-
- Information security / Hacking for noobs
 - <https://github.com/tkison/getting-started-in-infosec>
-
- Conference list 2020
 - <https://docs.google.com/spreadsheets/d/1SdJwWAwutrlKfh4o3c209hH81zB1e3gNS2StoBoqApU/htmlview#gid=0>



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



IMAGINE CHANGE AND TAKE ACTION



Keith Chapman | CTIA

<https://github.com/S1lv3rL10n/Talks>