# NICE Community Coordinating Council Meeting Agenda May 24, 2023 | 3:30-5:00 p.m. ET

BlueJeans: https://primetime.bluejeans.com/a2m/live-event/ptdjuvcu Dial In: (800) 520- 9950 | Pin: 3335462 followed by # to confirm

- I. Introduction and Ground Rules NICE Program Manager Susana Barraza (3:30 3:32)
  - The NICE Community Coordinating Council was established to provide a mechanism in which public and private sector participants can develop concepts, design strategies, and pursue actions that advance cybersecurity education, training, and workforce development.
  - Members are encouraged to participate in the meeting via the platform chat space and the Q&A space.
  - Reminder: The meeting is not intended for marketing or other commercial purposes.

## II. Opening Remarks

- a. Interim Academic Co-Chair Paul Bingham, Vice President and Dean, College of Information Technology, Governors University (3:32 3:35)
  - This is Paul's last month with the NICE Community Coordinating Council. He shared words or gratitude to the members.
  - "We mindlessly traverse the internet and enjoy a secured National digital infrastructure because good people, like the members of the NICE Community Coordinating Council, work diligently well outside the limelight to expand educational opportunities, and advocate for diversity and equity in the formation of policies and workplace roles in cybersecurity."
- b. Government Co-Chair Rodney Petersen, Director of NICE (3:35 3:38)
  - Looking forward to NICE Conference in Seattle. The theme is on "Resetting Expectations", which is not to say that the work of the NICE Community Coordinating Council hasn't been important or impressive, but that we need to continue the work, and in some ways, re-assess how we go about doing so.

## III. Standing Items (Paul facilitates)

a. Report Roundup – Learning from Good Ideas (3:38 – 3:45)

2023 Cybersecurity Skills Gap Global Research Report Presented by Melonia Da Gama, Fortinet URL:

https://www.fortinet.com/content/dam/maindam/PUBLIC/02\_MARKETING/08\_Report/2023-

cybersecurity skills gap report final.pdf?utm source=website&utm medium=pr&utm campaign=cybersecurity-skills-gap-2023

- The Fortinet Training Institute is responsible for training at the organization as well as the organization's Corporate Social Responsibility (CSR).
- As part of Fortinet's CSR, they provide training to develop the future cybersecurity workforce, focusing on students, women, minorities, and veterans. The certifications that the training supports are mapped to NICE Framework Work Roles to help those entering cybersecurity to navigate pathways.
- Fortinet's Skills Gap Report is an extension of their CSR work helps drill down into what kinds of organizations are looking for talent and who is going into cybersecurity. This is the second year of the report.
- The Report has a global scope, looking at all types of roles and company sizes, business sectors, and gender.
- The data shows that numbers keep going up:
  - The number of breeches companies experience is up by 4%.
  - There are more organizations with 5 or more breeches each year.
  - The reported costs associated with breeches is also going up.
  - More board members are asking organizations about what they're doing to address cybersecurity and are asking for increases in staff. This is a good indicator and shows that cybersecurity is becoming more of a priority for the c-suite.
  - Employers are asking staff to have more certifications and more organizations are willing to pay for staff to get certified.
- Fortinet's Security Awareness and Training Brief is a smaller report that will be coming out on May 31<sup>st</sup>.
- b. Strategy Stories New Developments that align to NICE Strategic Plan

Teacher Occupation Apprenticeship Programs (3:45 – 3:52)

Presented by Emma McCallie, Tennessee Department of Education

URL: <a href="https://www.tn.gov/education/news/2022/1/13/tennessee-pioneers-permanent-program-to-become-a-teacher-for-free--first-state-to-sponsor-registered-teacher-occupation-apprenticeship-.html">https://www.tn.gov/education/news/2022/1/13/tennessee-pioneers-permanent-program-to-become-a-teacher-for-free--first-state-to-sponsor-registered-teacher-occupation-apprenticeship-.html</a>

- Grow Your Own (or "teach your occupation") program are currently in 17 states and growing. Tennessee was first state to apply for recognition from the U.S.
   Department of Labor (DoL) as a registered apprenticeship program. They received recognition in January 2022.
- Specialty subjects such as STEM and AP classes struggle to find teachers.
   Additionally, it can be costly to become a teacher and first-year teachers often find it difficult to adjust to teaching.
- Teacher apprenticeships support this by getting more teachers prepared with experience. Teachers don't pay a dime for the apprenticeship and they gain 1-3 years of experience during the apprenticeship.

- In Tennessee, Grow Your Own (GYO) is supported by a \$20M State investment that was used to start the Tennessee Grow Your Own Center in 2020.
- GYO has partnerships with 65 organizations across the state and works with 14 education preparation providers and 63 school district to source and place teachers.
- Apprenticeship, by DoL requirements have employer involvement, on-the-job training, related instruction, compensation for skills gain, and a national occupation credential.
- Teacher apprentices may go through Masters, Bachelors, or licensing structures.
- The GYO cohort as of January 2023 is up to 200+ teachers and apprentices.
- Q&A:

Q: Don't school districts need to have funding to pay for the positions since the teachers are not fully certified and licensed to serve as a teacher?

A: The state pushing to continue to support districts in making smart Human Resource decisions and re-evaluate what types of credentials are necessary.

Q: How long is the average apprenticeship for someone without a degree?

A: Without a degree, that'd be a 3-year program (a bachelor's program condensed into 3-years, including summers).

Q: You mentioned Science and Math as "academic areas of need". What about Technology and Engineering? These are the teachers that often provide cybersecurity-related instruction. Are teacher apprenticeships being used to help address the need for teachers in cybersecurity-related courses or academic disciplines?

A: YES! All-encompassing STEM would certainly be the right category. Particularly in rural TN areas, we continue to find the need for educators in those related dispositions. Grow Your Own also is a competency-based program (rather than time bound) meaning retirees or those with prior learning can bring that to the table for credit.

JumpStart into Cyber Summer Program (3:52 – 3:59)

Presented by Ambreen Siraj, National Science Foundation; Kyle Jones, Sinclair Community College; Max Shuftan, SANS

URL: https://sinclairwfd.regfox.com/cyberstart

- The JumpStart into Cyber Summer Program is a collaborative effort between the National Science Foundation, SANS, Sinclair Community College, and the National Cybersecurity Training and Education Center (NCyTE)
- JumpStart is a two-step program to allow students to explore whether or not they would be interested in going into cybersecurity as a career. Part 1 is to offer a Capture the Flag Competition for students to test and learn skills. Part 2 is to retain students with diverse backgrounds by offering opportunity to gain a SANS certification.

- JumpStart is partnering with HBCU and PBIs for outreach to underserved communities.
- An <u>informational webinar</u> on the Program will be held on May 30<sup>th</sup> at 7:30pm ET.
- Registration for the Program is open now through June 4. Between June 5-June
  19, students well get access to a gamified platform called CyberStart where they
  play as an agent solving cybersecurity challenges and can gain badges. Those
  who score strongly, will get invited to join a Foundations training course and
  meet with mentors. At end of course, students can sit for the GFACT
  certification.

#### Q&A:

Q: what are the minimum requirements for part 1 and part 2? and will the session next week be recorded?

A: The webinar on May 30, 2023 will recorded.

Q: How will you ensure that this summer program reaches the underrepresented populations you seek to serve? What type of mentoring or support services will they receive?

A: Ensuring reach - Sinclair and SANS are working with guidance from NSF on outreach strategy, capturing demographic information as students register, and will be following eligibility set by NSF in selection for the training and certification.

A: Ensuring support - several certified and employed graduates from past training programs will provide ongoing mentoring via office hours, Slack, and tutorial sessions.

c. Framework Feature – Applications and Uses of Workforce Framework for Cybersecurity (3:59 – 4:06)

Special Issue: NICE Framework 2023 Volume
Presented by Laurin Buchanan and David Tobey, National CyberWatch Center
URL: <a href="https://www.nationalcyberwatch.org/wp-content/uploads/2023/02/SI-Call-NICE-Volume.pdf">https://www.nationalcyberwatch.org/wp-content/uploads/2023/02/SI-Call-NICE-Volume.pdf</a>

- This is the second Special Issue on the NICE Framework. The first volume of the CSJ Special Issue on the NICE Framework can be downloaded here: https://www.nationalcyberwatch.org/resource/csj-2020-nice-special-issue
- The CSJ is looking for examples of the usefulness, benefits, and challenges associated with the adoption, adaptation, or extension of the NICE Framework.
- A call for proposals for the special issue is open now.
- Virtual focus groups will be held to support exchange of ideas, methods, and approaches and get conversation going between researchers, academics, and industry to discuss what data the community needs or wants, where to go next, and find ideas for future systematic study.

- Transcripts of the discussions can be submitted to the CSJ for publication.
- Focus group proposals are due by June 1, 2023.
- d. Research Review- Driving Research on Effective Practices (4:06 4:13)

Cybersecurity Content Convergence (C³) Framework: Integration of Cybersecurity Content into Non-technical Curriculum
Presented by Cynthia Sutherland, Amazon

- Research was prompted because, as a Security Operations Chief, Cynthia saw a
  problem with collaborating with lawyers. Cynthia learned that lawyers did not
  have the knowledge needed to make informed decisions on cybercrime cases.
- The research looked at gaps between competency requirements for students in Juris Doctor programs versus professionals as well as gaps in curriculum development and instructional design practices for integrating cybersecurity into curriculum (not just incorporating it as an add-on).
- The research also looked at gaps in the NICE Framework Work Role(s) for Cybercrime Prosecutors by analyzing the Tasks, Knowledge, and Skills.
- Eight participants were interviewed for the study. These participants had experience integrating cybersecurity content into Juris Doctor curriculum programs that originally had no technical content.
- The research produced the C3 Framework, a logical model for capturing the external influences that impact the progress and success or failure of an educational program. External influences such as accreditation standards or impacts of institutional leadership and their priorities.
- The C3 model also produces the key elements of a successful education program.
- Last, the C3 Framework produces deliverables that allow you to scale program, such as competency models, education objectives, and the potential for accrediting a multidisciplinary curriculum.

## IV. Working Group Updates

a. Promote Career Discovery

Co-chairs: Roland Varriale, Argonne National Laboratory

- The group started to brainstorm project ideas to support the third area they are
  addressing, which is to help people that make cybersecurity guidance and
  career decisions understand the career pathways and help them to pass on
  those resources to those who want to pursue a cybersecurity pathway.
- Roland shared that (ISC)2 sent a workforce development career discovery
  questionnaire. The questionnaire's purpose was to re-create your cybersecurity
  journey and what steps you took along the way.
- The co-chairs held an internal leadership meeting to map out working group goals for the remainder of the year.
- Next meeting: June 21, 2023, at 3:30 p.m. ET

- b. Transform Learning Process Rodney Petersen, NICE
  - In the month of May, the Transform Learning Process Working Group had a joint meeting the K12 Cybersecurity Education Community of Interest.
  - During this meeting, both groups identified a strategic plan objective to support teachers and faculty in academia and industry through recognition programs.
  - The group brainstormed creative approaches to help increase the number of teachers and faculty in cybersecurity. The group will start a joint project team to start on this effort.
  - Next meeting: June 13, 2023, at 2:00 p.m. ET
- c. Modernize Talent Management Lynsey Caldwell, Leidos
  - In the month of May, the Modernize Talent Management Working Group welcomed a guest speaker Dr. Shane Stailey from Idaho National Lab.
  - Dr. Stailey provided an overview on the Competency Health and Maturity Progression Cyber Workforce Assessment (Cyber CHAMP).
  - Cyber CHAMP demonstrates ways to improve an organization's cybersecurity
    programs using the NICE Framework and helps organizations pinpoint exactly
    where to start improving their cybersecurity program using a step-by-step
    process that identifies the current cybersecurity posture, areas for
    improvement, and training paths that lead an organization to higher,
    measurable levels of cyber competency and maturity.
  - The meeting recording is available <u>here</u>.
  - At their last Working Group meeting, an update was also provided by the 'Guidance on Writing Effective Job Descriptions' project team.
  - The project team held various workshops with hiring managers to try and understand what their hiring needs are. There was various feedback on the need to create entry-level job opportunities.
  - The project team is accepting feedback on the guide. Email Arianna Schuler (arianna@vt.edu) to submit any feedback.
  - Next meeting: June 15, 2023, at 1:00 p.m. ET

## V. Community of Interest Updates

- a. Apprenticeships in Cybersecurity Co-chair: Katie Adams, Safal Partners
  - In the month of May, the Apprenticeship Community of Interest welcomed a guest speaker Jessica Randall from Drexel University.
  - Jessica provided an overview of the University's recently approved Cybersecurity Apprenticeship Program.

- There is an additional apprenticeship program being created in another Community College in Pennsylvania.
- The Apprenticeship COI has finished their Community of Interest survey. The final topic for their new project is "Surveying industry on cybersecurity occupations and current programs for registered apprenticeships".
- Kimberly Hauge from the Office of Apprenticeship at the Department of Labor will lead this new project. A co-lead to be determined.
- The Department of Labor recently approved a new national apprenticeship program for an organization called "Minorities in Cybersecurity".
- Next month's featured speaker will be Chris Rick with the Department of Labor Veteran Employment Training Services Division. He will be sharing information regarding various veteran programs including the Skills Bridge Program. The Skills Bridge Program can be used directly as a pre-apprenticeship pathway.
- Next meeting: June 7, 2023, at 11:15 a.m. 12:00 p.m. PT at the NICE Conference in Seattle, WA
- b. Cybersecurity Skills Competitions

Co-chairs: David Zeichick, California State University, Chico

- David Zeichick is commissioner of the National Cyber League. At the NICE
  Conference the NCL will be hosting a dinner. If you are interested reach out to
  David (david@zeichick.com).
- In the month of May, the Competitions COI welcomed a guest speaker Dr. Justin M. Pelletier from ESL Global Cybersecurity Institute, who presented on the Collegiate Penetration Testing Competition (CPTC). The CPTC is going into its 8th year and is composed of collegiate teams that are given a real-world situation to solve. For their 9th year, their theme is airport cybersecurity. Students will have access to a real-world scenario at a designated airport. The culminating event is a report. Students must create a final report explaining how to fix any vulnerabilities they discovered.
- Last month the group also welcomed guest speaker, Brad from US Cyber Games (USCG). The USCG game competition will take place August 1-3, 2023, in La Jolla, San Diego, CA. The sign-ups for season three open until June 1, 2023.
- The community of interest members are creating a site which will list all cybersecurity competitions.
- Next meeting: June 7, 2023, at 11:15 a.m. 12:00 p.m. PT at the NICE Conference in Seattle, WA
- c. K12 Cybersecurity Education

Co-chair: Terrance Campbell, Shelby County Schools

• The K12 Cybersecurity Education Community of Interest and Transform Learning Process Working Group are working on a joint project to support teachers and faculty in academia and industry through recognition programs.

- In terms of recognizing faculty, the members categorized the awards by faculty in 2-year and 4-year institutions.
- They plan to recognize faculty through social media, during the Cybersecurity Career Week, and/or with a monetary compensation.
- The group might develop a webpage to recognize faculty.
- Michigan Tech is holding a GenCyber Camp. Co-chairs are working with coordinators to help with post-event activities.
- Next meeting: June 7, 2023, at 11:15 a.m. 12:00 p.m. PT at the NICE Conference in Seattle, WA

#### d. NICE Framework Users

Mike Prebil, IT Specialist of the NICE Framework

- The NICE Program has an active request for comments on proposed updates to NICE Framework Work Role Categories and Work Roles. Learn more.
- The updates are intended to bring clarity and consistency to work roles based on conversations with subject matter experts.
- Send comments to NICEFramework@nist.gov no later than June 23, 2023, at 11:59 p.m. ET.
- NICE Framework staff are working on finalizing request for comments on Competency areas.
- NICE Framework staff will host a "NICE Framework 101: Getting to know the NICE Framework" workshop in Seattle at the NICE Conference. There is still space to register for the workshop if you are already a registered conference attendee. More information here.
- The NICE Framework Users Group is dedicated to brainstorm, discuss, and troubleshoot around the NICE Framework.
- To join the NICE Framework Users Group, subscribe by sending an email to <u>niceframeworkusers+subscribe@list.nist.gov</u>.
- In-person meeting: June 7, 2023, at 11:15 a.m. 12:00 p.m. PT at the NICE Conference in Seattle, WA

## **VI.** Project Progress Reports

- a. NICE Conference and Expo (Seattle, Washington) June 5-7, 2023
   Presented by Randy Pestana, Florida International University
   URL: <a href="https://niceconference.org/">https://niceconference.org/</a>
  - Randy looks forward to seeing everyone in Seattle. The conference is happening June 5-7, in Seattle, WA.
  - The conference is officially sold out. There is a waitlist for those who are interested in attending. If conference organizers receive cancellations, they will go based off the waitlist. Email info@niceconference.org to join waitlist.

- If you are registered for the conference, you will have the opportunity to register on the spot for the pre-conference workshops. All pre-workshops have open seats except for the Gamification Workshop.
- Pre-conference workshops have an additional cost.
- Florida International University wants to thank and recognize their partners who support the NICE Conference.
- NICE Local Stakeholders Pre-Event recording is now available here.
- The NICE Conference full agenda is available online and on the Whova App.
- There will be four NICE Community of Interest meetings during the conference on Wednesday, June 7, 2023.
- NICE K12 Cybersecurity Education Conference (Phoenix, Arizona) December 4-5, 2023
   Presented by Amber Lindsay, iKeepSafe

URL: <a href="https://www.k12cybersecurityconference.org/">https://www.k12cybersecurityconference.org/</a>

- The conference will be held Dec 4-5, 2023 in Phoenix, Arizona.
- This year's event will be held in Hilton Phoenix Resort at the Peak. To keep cost down, they have reserved rooms at the government prevailing rate and the resort fee waived.
- The call for speakers launched last month and will be open through July 14, 2023.
- The planning committee is seeking proposals from all of those who have compelling messages from K12 cybersecurity education.
- Last year's post-conference survey recommended and showed the need to have more K12 speakers.
- This year's conference theme is "Designing K12 learning experiences to build a diverse and skilled cybersecurity workforce".
- For more information to submit a proposal, visit the conference website.
- One of the most popular events during the conference is Cyber Signing Day. This
  event highlights high school students who are participating in cybersecurity
  internships or apprenticeships. You can nominate a student <a href="https://example.com/here">here</a>.
- The planning committee is seeking students for their student panel. The panel
  will be in-person at the conference. They are seeking a middle or high school
  student keynote speaker. Nominate a student by sending an email to
  k12cybercon@ikeepsafe.org.
- The National School Counselor Association is hosting a School Counselor Panel. They will be bringing a panel of school counselors from across the nation.
- iKeepSafe has sponsorship and exhibitor opportunities available. Learn more.
- To receive any conference updates, sign up <u>here</u>.

## c. US Cyber Games

Presented by Brad Wolfenden

URL: https://www.uscybergames.com/

- The Season III kick-off virtual event is happening on Thursday, June 1 from 3-6 p.m. ET. Registration available <a href="here">here</a>.
- Opening keynote will be Marian Merritt, Deputy Director of NICE.
- Closing keynote will be Antonio "T" Scurlock, Deputy Chief Learning Officer at CISA.
- Athletes would like to be more engage with their competitors therefore they
  have created Cyber Rush Week. During Cyber Rush Week, athletes will have an
  entire week filled with extracurricular activities.
- Anyone may register to play in the US Cyber Game Open, June 2-12, but only
  athletes ages 16-25 can apply to be considered for Season III, US Cyber Combine
  and eventually the chance to make the Season III, US Cyber Team. The US Cyber
  Combine event is by invite only.
- Draft day is scheduled for Monday, October 16, 2023 as part of Cybersecurity Career Week.
- The International Cybersecurity Championship and Conference will happen on August 1-4, 2023, in La Jolla, San Diego, CA.

## VII. Featured Topic

Grow Your Own (GYO) Educators
Presented by Taylor White, New America

URL: https://www.newamerica.org/education-policy/grow-your-own-educators/

- New America is a non-profit non-partisan think and action tank in Washington DC.
- The K-12 Education Team uses a research-based and solutions-oriented approach grounded in principles of equity, efficiency, quality, and transparency to address issues of access and quality in American schools.
- The Center on Education & Labor (CELNA) works to strengthen the link between education and economic mobility through the policy domains of education and workforce development.
- Teacher preparation in the US is categorized into two categories. First, through a bachelor's degree (traditional teacher preparation) and second, through alternative certifications.
- Traditional teacher preparation is 4 to 5-year undergraduate bachelor's degree programs.
- Alternative routes are a faster-track pathway into the profession, usually designed for individuals who already have a bachelor's degree.
- Teaching licenses requirements vary by state.

- In 2020 there were 636,515 active apprenticeships in the U.S.
- In January of 2022, Tennessee was the first state to register a teacher apprenticeship program with the U.S. Department of Labor.
- As of March of 2023, there are 16 states with Registered Teacher Apprenticeships.
- Teacher preparation programs have experienced steady declines in enrollment.
- K-12 Teacher Registered Apprenticeship provides individuals with the opportunity to get paid-on-the job training while earning a degree at little to no cost.
- The Brazosport ISD Teacher Apprenticeship provides the chance to work in the classroom and employment while completing their preparation to become a certified teacher. The program also provides multiple entrances with scaffolded support to enter the teaching profession, also known as on-ramps, which are designed to meet people where they are in their college and professional journey.
- Teacher residencies are alternative models that provide year-long clinical training.
- Contact information:
  - Taylor White (whitet@newamerica.org)
  - Amaya Garcia (garciaa@newamerica.org)

## VIII. Closing Remarks and Next Meeting Reminder

The next NICE Community Coordinating Council Meeting will be June 28, at 3:30 p.m. ET.