

NICE Community Coordinating Council

Meeting Minutes

November 30, 2022 | 3:30-5:00 p.m. ET

I. Introduction and Ground Rules

NICE Program Manager Susana Barraza

- 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 it is not intended for marketing or other commercial purposes.

II. Opening Remarks

- a. Industry Co-Chair – Bridgett Paradise, Chief People & Culture Officer, Tenable
 - Bridgett welcomed everyone to the call.
- b. Government Co-Chair - Rodney Petersen, Director of NICE
 - Rodney is on a temporary detail to support the CHIPS program office within the Department of Commerce. Significant amount of Federal funding will be made available in the coming months to support the semi-conductor industry in the United States to support chips manufacturing which will require a semi-conductor workforce. Much of Rodney's participation is on advising and counseling about how to develop, educate, train and even define that workforce. Fundamentally, the work shows the importance of having interoperable workforce frameworks. Rodney is looking forward to it and how it can benefit the work of NICE and vis-versa.

III. Standing Items

- a. Strategy Story - New Developments that align to NICE Strategic Plan
JobSIDE & JEDx
Presented by Jason Tyszko, U.S. Chamber of Commerce Foundation
URL:https://www.uschamberfoundation.org/sites/default/files/USCCF_JEDx_Design%20Phase%20Report_ViewOnly.pdf
 - Jason Tyszko is the Vice President of the U.S. Chamber of Commerce Foundation. Two of the center's initiatives, JobSIDE and JEDx, are very synergistic with the work of NICE particularly around the cybersecurity framework and closing the data gap with employers.
 - The origins of JobSIDE is the [Talent Pipeline Management Initiative](#) (TPM) and applying lessons learned from supply chain management to human capital workforce challenges. As part of orchestrating the talent supply chain a big issue was related to how employers organize their hiring requirements.
 - JobSIDE is a collection of new tools, currently under development, allowing employers to pull together multiple frameworks and job descriptions to produce a

de-duplicated master competency list seamlessly. It will allow employers to do job analyses and validate which skills and at what priority level. Employers can then publish an employer validated job profile that is skills and standards based. It will make employers better users and consumers of competency and skill frameworks for the use in putting together a job profile and going through employer validation which is critical for these particular jobs. These will go into a repository which will be available to other employers in this community as a source of validated employer data. They will also track where the data is coming from and how employers are validating and using the data for their jobs. It will be tested with their talent supply chain partners and eventually made available to any employer who wants to use it.

- Going to build out an application program interface (API) so that a profile is publicly available and can be fully integrated into an HR system for use in producing a job listing. JobSIDE will automate how employers use and produce skill profiles and then make that data more readily available for people to use as part of their education or workforce solution. The JobSIDE application will be attached to their larger library system supported by their T3 network. Wherever competency frameworks are being housed that has adopted that protocol, other employers using JobSIDE can search all of those libraries for frameworks they might want to use in their analyses but they can also contribute their own skill profiles to that library network.
- JEDx (Jobs and Employment Data Exchange): If successful, JEDx could produce a comprehensive jobs and employment record directly at the source that could be used to satisfy a wide variety of reporting requirements in government. It will improve the quality, standardization, timeliness, and the structure of data which will drive a whole new generation of analytics. It will also give workers the ability to validate records of their employment history.
- Q&A:
 - Q: When is the implementation planned for JobSIDE?
A: The second half of next year with most of the software development happening in the first half.
 - Q: Are you limiting the initial "job classification" sets in this first version?
Technology? Cybersecurity? Chip MFG, etc. or is it broader across all the workforce?
A: Have not made that determination yet. Based on the partners in the pilot we will let them make that determination as to what should go first but there is a strong possibility that cybersecurity will be on the shortlist.
 - Q: That looks like you're building the architecture on Amazon's services, is that correct?
A: Need to build a sandbox for testing so expect to rely on something like Amazon Services for the pilot phase.
 - Q: What possibilities exist for learning and employment records (LERs) here?
A: If successful once scaled, it could provide an infrastructure to give every American worker a record of their employment history that can be added to a digital wallet. It can be used for job verification or when applying for government benefits and entitlements. These records can empower the American worker.
 - Q: How do these initiatives relate to your work with Credential Engine? For example, the NICE Framework data is in the Credential Registry.
A: The JobSIDE node is going to be part of the larger T3 Network of libraries. When a library, like Credential Engine, adopts that protocol, it will allow one to search across

the entire network. You will be able to search all of the frameworks that Credential Engine has and use them in the JobSIDE tools.

b. Framework Feature – Applications and Uses of Workforce Framework for Cybersecurity
Cooperative Learning

Presented by Ran Hinrichs, Sr. Research Associate

- Worked on a paper in 2002 at Microsoft with Bill Gates on the vision of education for the Department of Commerce. That vision has come alive today. They considered the pipeline and how to get people moving from the pipeline at all levels. How do you engage each level of the community so that they have someplace to go?
- Created the Cyber Alumni, which is a group of graduate students who have been practicing cybersecurity standards for a long time who help students in lifelong learning.
- At the ISRM Certificate, under the current grant they are working on at Oregon State University, they are creating a baseline curriculum that is for cybersecurity that follows the KSAs, the KUs and some of other industry standards that come from various competency groups as well, that can be shared in a box and provided to all of the NCAE schools. It is being tested in the pacific northwest and will move it through the different schools next year.
- They work with industry. The model is cooperative so a baseline curriculum is used from universities, tech schools and community colleges.
- It is integrated into a stand-alone cyber education in a box and partnered with different industry members to create increased value in the delivery of that solution. It allows people to go directly into their organizations and work. Trying to get mid-level management rather than the entry level management. Start placing people who can get policies done, integrate incident and response plans and do table top exercises.
- Cyber Security in a Box: start by looking at the bottom level of a new tool in cybersecurity assessment that comes from Haystack. The tool maps people directly into the 52 work groups in the NICE Framework using a battery of tests. Before the student begins to learn they already have a strong identity of what job classification they will probably fall under given their skillsets.
- They worked with educational teams and started to create an Amazon.com version of 'follow the students'. What are the student's skills, knowledge, capabilities, their passions, interests and other activities they engage in, beyond the LER? Build curriculum around the student.
- They start with a baseline set of content which is a proven set of courses that focus on the rules and tools of cybersecurity. Industry is looking for people who understand the law, compliance and policy, marketing, and ethics of cybersecurity that more technical programs often miss. They pair that with an outside certification group, any certification group, but the one chosen for this particular delivery is EC Council. They have also partnered with CompTIA.

c. Research Review-Driving Research on Effective Practices

CTE Fields, Alignment, and Postsecondary Degrees: The Impact of Career and Technical Education Credit Taking

Presented by Oscar A. Aliaga, PhD, University of South Florida

- Oscar's research looked at what are the levels of CTE credit taking in high school that lead students to either working right after high school or enrolling in a post-secondary education program. Also, if a student does participate in CTE classes and does enroll in a post-secondary school, are they majoring in the same field? Looked at four levels of CTE credit taking comparison groups in high school:
 - 2 CTE credits
 - 2+ CTE credits
 - 1.0-1.5 CTE credits
 - 0.0-0.5 CTE credits
- Predicting Enrollment in PS Degrees - Two-Year Degrees:
 - 2 CTE credits predict enrollment in 6 of 12 fields
 - 2+ CTE credits predict enrollment in 9 of 12 fields
 - 1.0 – 1.5 CTE credits predicts enrollment in all fields (only level for CIS)
 - Any level predicts enrollment in 4 fields: Communication, Health, Hospitality & Tourism, and Manufacturing
 - All fields: The more academic and college credits, the higher the odds of enrolling
 - CIS: Male, African American, Hispanic, and Native Hawaiian & Pacific Islander
- Predicting Enrollment in PS Degrees-Four-Year Degrees:
 - 2 CTE credits predict enrollment in 8 of 12 fields
 - 2+ CTE credits predict enrollment in only 5 of 12 fields
 - 1.0 – 1.5 CTE credits predicts enrollment in only 2 fields
 - No level predicts enrollment in CIS (less likely to enroll in 4-year degrees)
 - All fields: The more academic credits (only), the higher the odds of enrolling
 - CIS: Male, Asian, and African American
- Is there an Alignment between CTE Fields in HS and Postsecondary Majors for 2-Year Degrees (Fields collapsed in 6 career areas (CIS included in Engineering Manufacturing and Technology (EMT)))?
 - 2 CTE credits predict enrollment in 5 of 6 career areas
 - 2+ CTE credits predict enrollment in all 6 career areas
 - 1.0 – 1.5 CTE credits predicts enrollment in 3 career areas
 - Any level predicts enrollment in 3 career areas: Business, Engineering, Manufacturing & Technology (including CIS), and Health Science Technology
 - All fields: The more academic and college credits, the higher the odds of enrolling in 4 career areas, including EMT
 - CIS: Male, Asian, African American, Hispanic, and multi-race
- Is there an Alignment between CTE Fields in HS and Postsecondary Majors for 4-Year Degrees?
 - 2 CTE credits predict enrollment in 5 of 6 career areas
 - 2+ CTE credits predict enrollment in all 6 career areas

- 1.0 – 1.5 CTE credits predicts enrollment in 3 career areas
 - Any level predicts enrollment in all 6 career areas, including CIS (EMT)
 - All fields: The more academic and college credits, the higher the odds of enrolling in 4 career areas, including EMT
 - CIS: Male, Asian, and African American
- Q&A:
 - Q: When are you expecting the research results to be published?
 - A: Sending the findings in for publication within the next 6 months.

IV. Working Group Updates

a. Promote Career Discovery

Co-Chair providing update: Keith Davis, Koinonia Family Life, Inc

- Brainstormed on details needed to launch a successful Cybersecurity Ambassador program. They learned more about existing programs. Lemi-ola Erinkitola shared her experience as an Ambassador with the 'By Kids For Kids (BKFK) Educator Ambassador Program'.
- Concluded to keep Ambassador program focus to K-12 (students, parents and educators)
- Site: [Promote Career Discovery Working Group | NIST](#)
- Next meeting: January 18, 2023 at 3:30 p.m. ET

b. Transform Learning Process

Co-chair providing update: Dr. Donna Schaeffer, Marymount University

- The NICE Community Coordinating Council has heard from two of the working groups project teams over September and October.
- The group approved two new project charters during the last meeting.
 - 1.) Create a resource guide for employers to provide information on free and low-cost training modules and programs, for building a diverse and inclusive cybersecurity workforce.
 - 2.) Look at products and service companies to support efforts to have performance-based assessments to measure cybersecurity competencies.
- The projects will work to identify best practices, products and services available across the industry and make those more known to the community.
- [Transform Learning Process Working Group | NIST](#)
- Next meeting: December 14, 2022, at 3:00 p.m. ET

c. Modernize Talent Management

Co-chair providing update: Dr. Melissa Woo, Michigan State University

- Guest speaker, Brian Correia, spoke about a project between [SANS](#) & [The Society for Human Resource Management \(SHRM\)](#). There is so much dialogue around how HR people don't understand the IT or InfoSec people and vis-versa. SANS and SHRM are now speaking to each other about cybersecurity hiring and retention.
- Talked about the status of two of their current projects and will give one final look at them during the next meeting.

- Launching a new project on Writing Effective Job Descriptions for Employers in order to provide good guidance and tools to recruit successfully. Kick off meeting will take place in the near future.
- Site: [Modernize Talent Management Working Group | NIST](#)
- Next meeting: December 15, 2022 at 1:00 p.m. ET

V. Community of Interest Updates

a. Apprenticeships in Cybersecurity

Co-chair: Debbie McLeod, McLeod Information Systems; Tony Bryan, CyberUp

- A presentation was provided on what the intermediary take was on the National Apprenticeship Sprint.
- Keith Clement presented the comparative analysis white paper project findings on the '*Cybersecurity Education/Workforce Talent Acquisition and Retention Models with Apprenticeship Pathways and Training Pipelines Preparation Tracks*' with strategic recommendations and policy solutions. Final report is due to be completed by the end of this week with advanced copies to be sent out in the very near future.
- Kimberly Hague, from the Department of Labor, gave a wrap up of the Apprenticeship Week.
- Site: [Apprenticeships in Cybersecurity Community of Interest | NIST](#)
- Next Meeting: January 13, 2023, at 11:00 a.m. ET

b. Cybersecurity Skills Competitions

Co-chair: Amelia Philips, University of the Cumberlands

- The last meeting included two special presentations: 1.) an update was provided on US Cyber Games 1 as well as about the plans for the second US Cyber Games and 2.) a presentation was provided on the Virginia Cyber Range.
- Discussed an informal meet up at the K12 Conference for those that will be in attendance.
- Brainstormed ideas for 2023. One of the ideas includes updating a list of competitions and adding more details to the list (what people can search, who they are catering to, cost, etc.)
- Site: [Cybersecurity Skills Competitions Community of Interest | NIST](#)
- Next Meeting: January 19, 2023, at 3:30 p.m. ET

c. K12 Cybersecurity Education

Co-chairs: Terrance Campbell, Shelby County Schools; Thomas Trevethan, Palo Alto Networks; Lemi-Ola Erinkitola, The Critical Thinking Child LLC

- The upcoming conference took up most of the meeting discussion. A hybrid meeting will take place at the conference where people can also join online. The meeting will be held on Tuesday, December 6, 2022 at 8:00am EST.
- Discussed doing an Ambassador Program together with the Promote Careers Discovery Working Group. Lemi-Ola provided an example of an ambassador program in which she has participated.
- Had a NICE Workforce Framework FAQ development session lead by Karen Wetzel.
- Site: [K12 Cybersecurity Education Community of Interest | NIST](#)
- Next Meeting: December 6, 2022, at 8:00 a.m. ET

d. NICE Framework Users

Karen Wetzels, NICE

- A K12 FAQ is coming out next week just in time for the K12 Conference. Caron Carson of the NICE team will be at the conference and hoping to have conversations about what people think should be added or developed.
- Working on a quick start guide for the NICE Framework.
- Next year they are looking at a project to gauge the use of the NICE Framework.
- Releasing updated statements end of this year/early next year. The release will be together with the final competency NISTR and next draft of competency areas.
- Site: [NICE Framework Users Group | NIST](#)

VI. Project Progress Reports

a. NICE Conference & Expo – June 5-7, 2023, Seattle, WA

Presented by Paola Hechavarria, Florida International University

URL: <https://niceconference.org/>

- Conference theme: ‘Resetting Expectations: Creating Accessible Cybersecurity Career Pathways’
- Call for proposals: October 3, 2022 - January 22, 2023. Submit proposals to: <https://niceconference.org/proposals/>.
- The Regional Initiative for Cybersecurity Education and Training (RICET), Virtual Pre-Conference Event took place on November 16, 2022 It was hosted by OAS and FIU and supported by NICE. There were over 600 virtual attendees from across the region. Additional information can be found [here](#).
- Early Bird Registration: February 27, 2023 – March 19, 2023; Regular Registration: March 20, 2023 – May 14, 2023; Pre-conference event in Seattle, WA: April 2023 (est.); Late Registration (if applicable): May 15 – May 28, 2023
- Visit <https://niceconference.org/sponsors/> for information about sponsorship opportunities.
- The Westin Seattle room block is open: <https://niceconference.org/hotel-travel/>
- Connect with us:
 - Website: www.niceconference.org
 - Email: info@niceconference.org
 - Twitter: @nicecybercon
 - NICE Conference LinkedIn Group: <https://www.linkedin.com/groups/12696840/>

VII. Featured Topic

National Apprenticeship Week

Kimberly Hauge, US Department of Labor

URL: <https://www.apprenticeship.gov/national-apprenticeship-week>

- Beat previous records and proclamations for the National Apprenticeship Week. There were 364 proclamations this year with a goal of 250. There were almost 1,400 events. The partners were all wonderful to work with.

- There were over 200,000 attendees that had exposure to registered apprenticeships and events in all states.
- 30% of the events were virtual. 70% of them took place during the National Apprenticeship week.
- The Secretary of Labor, the Secretary of Commerce and the Secretary of Education all traveled with the First Lady and visited the Rolling Meadows High School in Chicago, Illinois on the first day of National Apprenticeship Week. They heard students, apprentices and teachers talk about apprenticeship programs. They went on a school tour there as well. The group met with hundreds of employer members of the business round table at the Chicago Business Network and discussed the benefits of registered apprenticeships.
- The following day the Deputy Secretary of Labor, White House representatives, Department of Commerce representatives and Veterans Affairs representatives met with over 80 employers and apprentices to celebrate the 120-day sprint at the White House. Focused on celebrating the new programs.
- A [White House Fact sheet](#) was released with details on the new programs.
- The Office of Apprenticeship gave a provided a few new initiatives and released information about some new work being done. Released a new interactive data map which allows the public to view some key statistics on the apprenticeship programs. It will help look for opportunities of growth and where improvements to equity are needed.
- The Apprenticeship Office released the [evaluation](#) on the American Apprenticeship Initiative during the National Apprenticeship Week. Plan on having a public webinar on the evaluation in January.
- Announced the launch of an Apprenticeship Trailblazer Initiative which is focused on Apprentices. The initiative will provide an opportunity for the apprentices to come together and provide feedback for the office and help celebrate them as ambassadors of the apprenticeship program. Currently no website available on this initiative.
- Almost 200 apprenticeship programs got started during the sprint. Almost 8,000 apprentices.
- Sign up for the [newsletter](#).
- A ceremony was held to celebrate the achievements of six different businesses that had registered new programs on either the federal or state level, attended by the Deputy Secretary of Labor.
- Debbie McLeod talked about a South Carolina statewide event that brought together multiple speakers on a panel to speak to what apprenticeships do and how they change people's lives. The panel also discussed the diversity that comes along with apprenticeship.
 - Webinars were conducted to bring awareness for the need to have cybersecurity plans in place and how apprenticeships can always be added to a cybersecurity division. Also discussed how apprenticeships can be used to upscale a workforce.

VIII. Closing Remarks and Next Meeting Reminder

The next NICE Community Coordinating Council Meeting will be **January 25, 2023** at 3:30 p.m. ET.