**NICE Working Group**

**Meeting Minutes**

**Date: February 20, 2020 Time: 3:30 PM EST**

**SharePoint Page:** <https://nistgov.sharepoint.com/sites/NICEProgram/NICEWG>

1. **Introduction and Ground Rules**
2. Danielle Santos, NICE Program Manager, welcomed participants to the meeting. The NICE Working Group (NICEWG) is setup to provide a mechanism for collaboration between academia, government, and industry, and to discuss strategies and actions to aid in workforce development.
3. During this meeting the Adobe Connect chat box feature should be utilized to provide feedback and ask questions.
4. Danielle urged all participants to collaborate and share information. The NICE Working Group mailing list is a convenient way to disseminate information. The [SharePoint site](https://nistgov.sharepoint.com/sites/NICEProgram/NICEWG/Pages/home.aspx) stores meeting agendas and minutes, documents, and member information.
5. Danielle noted that NICE Working Group mailing lists and meeting teleconferences are not intended for promotional announcements, advertising, product-related press releases, or other commercial use.
6. **Opening Remarks**

## Industry Co-Chair Jon Brickey, Mastercard, provided some opening remarks. This is the calm before the storm for those attending RSA in February. The conference provides a great opportunity to meet and connect with people. John will be there Monday through Friday morning. View his [LinkedIn account](https://www.linkedin.com/in/drjonbrickey/) if you wish to meetup.

## Government Co-Chair Rodney Petersen, Director of NICE, thanked participants for joining. Most of the Program Office will be at the RSA Conference. In addition to NICE’s participation at the NIST Cyber booth, they will have meetings and presentations. Anyone interested in attending the NICE Framework use case discussion can email the Program Office to receive an invite.

#### As a reminder, the Program Office is in the process of updating the [NICE Strategic Plan](https://www.nist.gov/itl/applied-cybersecurity/nice/about/strategic-plan). Subgroup members have been engaging in conversation on ideas during monthly meetings. New ideas or innovations for the next 4-5 years are under discussion. All NICE Working Group members may contribute feedback directly to the Program Office or in a monthly Subgroup meeting.

#### Rodney participated as a witness during the House Science Subcommittee on Research and Technology hearing on “More Hires, Fewer Hacks: Developing the U.S. Cybersecurity Workforce”. Other witnesses were from IBM, Tennessee Tech, and Merit Network, Inc. The overall atmosphere was friendly. Some key take-aways include:

#### Most testimony was focused on our role of coordinating and collaborating among the federal agencies and secondly on the NICE Working Groups public-private partnership.

#### When asked to discuss NICE Specifically, Rodney cited the Cybersecurity 2014 Enhancement Act. They are very supportive of the role NICE and NIST are playing.

#### There was interest in multiple pathways to cybersecurity. The committee is interested in STEM education and introducing STEM at earlier ages to get younger people interested. Also looking at how to bring diversity, gender, geographic, etc. into the workforce.

#### There was a law passed requiring NIST to develop resources for small and medium businesses, specifically, how to help those small and medium businesses use the NICE Framework.

#### Finally, the importance of coordinating with industry and manufacturing sectors was discussed. There might be industry specific requirements such as specific context within the NICE framework considered as a reference. Even though the NICE Framework is generally applicable, some industries may be nuanced. The Program Office will consider the testimony and comments when working on the NICE Strategic Plan.

1. **Standing Items**

## **Report Roundup – learning from good ideas** Jaimie M. Francis, Senior Director, Programs and Policy, U.S. Chamber of Commerce Foundation / Education and Workforce (CEW), spoke about ‘Upskilling with TPM.’

#### The Center for Education and Workforce is a nonprofit affiliate of the U.S. Chamber of Commerce. They work with many local chambers in various communities. Part of their work is trying to help local chambers understand how employers can better manage relationships with education and training partners. Their goal is to help inform with data so that solutions are based off information from employers themselves. Jamie spoke about six strategies.

1. TPM orientation. Understanding what it’s meant to do. They want to help the employer in a collaborative environment using data collected from the labor market.
2. Get the facts straight. As jobs are verified, communicate competencies.
3. Identify a potential shared language so they are all are on the same page.
4. Analyze where talent comes from. Do providers have the capacity to meet the demand? If traditional pipelines cannot provide, identify new partnerships.
5. Implementation phase. Bringing all partners together to help co-develop solutions. Information here is fueled by employers who now have ownership.
6. Improvement and identification of root causes. They’ve realized there is never one solution, no assumptions allowed, communication is key, and to make the business case.

#### The hope is to increase long term business engagement.

#### Cyber positions vary across the country and differs by region and by industry. They want to unpack data versus making assumptions.

#### For more information, [TPM](https://www.uschamberfoundation.org/talent-pipeline-management) has many resources and also links to existing curriculum. See presentation and find out more [here](https://www.uschamberfoundation.org/reports/upskilling-talent-pipeline-management-tpm).

## **Strategy Stories – new developments that align to NICE Strategy**

## Doug Rapp, CEO, Cyber Leadership Alliance, presented on ‘Operationalizing the NICE Framework’. This topic supports the [NICE Strategic Plan](https://www.nist.gov/itl/applied-cybersecurity/nice/about/strategic-plan) Objective 3.2: Publish and raise awareness of the NICE Cybersecurity Workforce Framework and encourage adoption

#### The Cyber Leadership Alliance started in order to focus on three things. To promote economic development in cybersecurity, promote workforce development in cybersecurity, and to advocate for cybersecurity.

#### Within the state of Indiana, they assessed inventory on cyber courses. There were 5 CAE’s and 33 diff courses. For CAE, a requirement was to map the curriculum to the [NICE Framework](https://www.nist.gov/itl/applied-cybersecurity/nice/nice-cybersecurity-workforce-framework-resource-center). They held events around the state and brought in cyber stakeholders from education and academia. They partnered with the Indiana (IN) Executive Council and introduced them to [CyberSeek](https://www.cyberseek.org/) as a resource to get data. The state had no idea it existed and further introduced NICE. The state was asked to join the leadership to push development of the workforce. After securing leadership with the state, they looked at the workforce pipeline.

#### They realized that skill level 1 had no quick turnaround. They were able to pull funds from the state to do immersion training and completed most of the adult pipeline. They then worked on cybersecurity apprenticeship programs.

#### CyberKnights evolved as a tool used to connect the workforce and others interested to college partners. The NICE Framework is at the center of it all. The Department of Education and the Department of Workforce needed a common language when talking about what they needed.

#### CyberKnights technology allows uploading of resumes, certifications, and skills testing. The data maps to the NICE Framework. If the mapping criteria is used, progress to a certain job can match to a college or university that best suits their needs. An employer interface is being built to look for candidates. The tool gets all stakeholders on the same vernacular. The first line leader who is hiring is the one who really needs this tool. They are now concentrating on K12.

#### Registered apprenticeship program sponsors can align to the CyberKnights platform.

#### See presentation for more information.

## **Metric Moment – what gets measured gets done**James D. Ashley III, Lead Engineer/Project Manager, CSUSB, presented ‘The NICE Challenge Project: 3 Years of Growth.’

#### James graduated from CSUB and is the Project Manager and Lead Engineer. Dr. Nestler is tenure track faculty at CSUB and is the Instructional Designer. They are supported by a cross functional engineering team.

#### The platform makes the NICE Challenge possible, at scale, year-round. Use of the program does not require downloads or installations. It is designed to be a one stop shop.

#### There are 75 challenges mapping to over 100 additional KSAs. Some include live cyber-attacks, identifying cyber-attacks over the wire, and configuration.

#### Platform features include adding live reservations and workspace events, overseer features, and strategy guides.

#### There is a challenge report exported for each challenge.

#### The project team performs outreach through online engagement and by attending in-person training and other events such as the annual NICE Conference, NICE K12 Conference, 3CS, and more.

#### Growth in the userbase and utilization include a 510% increase in curators, about 200 new educational institutions per year, and about 1,450% increase in workspace provided over the last 4 years.

#### The NICE challenges are mostly used in capstone experiences and exams, and in competitions. They have a large repository of data to identify trends on work roles, national trends, and local outliers. In the future they wish to continue refining the current challenges, explore new sections of the NICE Framework, expand assessment data, and transition the platform into a national cyber range.

#### See presentation and find out more [here](https://nice-challenge.com/).

1. **Subgroup Updates**

## **Apprenticeship –**

## Girish Seshagiri, Executive Vice President and CTO at ISHPI Information Technologies and Co-chair, provided the update.

* The group has been working on a survey for the ‘Comparative Analysis of Work Enhanced Learning Models’ project team. The survey was completed and sent out to various academic distribution lists. The survey is being utilized to receive feedback on how colleges and employers utilize various work enhanced learning models to assist in making graduates more employable.
* The survey was sent to approximately 250 people in academia. They would like to send it out to more people for additional data such as CAE colleges.
* The results will be published once the survey is complete. They hope to follow up with a similar survey for employers. The goal is to get more people into unfulfilled job roles.
* In looking to increase diversity in workforce; one of the resources to utilize for minorities are the historically black colleges and universities. Girish has been working directly with many of them in the south. Last Wednesday he attended a summit in South Carolina with support from the White House.
* It has been a challenge to improve minority participation, and the needle is not moving. Minority participation needs to increase.
* The next subgroup meeting is scheduled for February 28th at 11:00am, ET.
* Visit the Apprenticeship subgroup website [here](https://www.nist.gov/itl/applied-cybersecurity/nice/about/working-group/apprenticeship-sub-working-group).
1. **Collegiate –**

### Rodney Petersen, Director of NICE, provided the update.

* We intend to kick off a project team on cybersecurity principles which is also being discussed within the K12 subgroup. Hopefully, many NICE Working Group members are aware of the webinars from both [last](https://www.nist.gov/news-events/events/2020/01/nice-webinar-learning-principles-cybersecurity-practice) (Learning Principles for Cybersecurity Practice) and [this](https://www.nist.gov/news-events/events/2020/02/nice-webinar-intersection-privacy-and-cybersecurity-workforce) (The Intersection of the Privacy and Cybersecurity Workforce) month. We encourage you to look at those webinars.
* Look for more information next month about the launching of that team.
* The next Collegiate subgroup meeting is scheduled for March 10th at 2:00pm ET.
* Visit the Collegiate subgroup website [here](https://www.nist.gov/itl/applied-cybersecurity/nice/about/working-group/collegiate-sub-working-group).

## **Competitions –**

### Amelia Phillips, Highline College, Co-chair, provided the update.

* The PRCCDC recently had their qualifiers with 19 teams competing for 12 seats. Subgroup members discussed teams that do not qualify and how they can improve. Additionally, the best teams typically keep logs from the previous year’s competition.
* They reviewed the NICE leadership meeting minutes and discussed the need for greater collaboration between the subgroups.
* The group continued their discussion of the NICE Strategic Plan and how to incorporate non-IT sensitive jobs.
* Harry Mourtos provided a presentation on the [Presidents Cup Cybersecurity Competition](https://www.cisa.gov/presidentscup). He discussed the rounds and provided a demonstration as well.
* The group also reviewed their survey and discussed projects, guides, and podcasts.
* The next Competitions subgroup meeting is scheduled for March 17th at 3:00pm ET.
* Visit the Competitions subgroup website [here](https://www.nist.gov/itl/applied-cybersecurity/nice/about/working-group/competitions-sub-working-group).

## **K12 –**

Laurin Buchanan, Secure Decisions, Co-chair, provided the update.

* The group reviewed the NICE Strategic Plan. Members discussed how the group is being supported and what is missing.
* For Goal 1, the group discussed how the language is workforce focused. People need to emphasize the personnel needed for the training and teaching.
* For Goal 2, the group noted that the goal itself measures outcome but nothing specific measures aptitude.
* Goal 3, the group again noted the plan being more workforce oriented. There is a need to help people see the connection between education and career development as critical.
* It was a lively discussion. The feedback will be summarized and provided back to the NICE Program Office.
* The next K12 subgroup is scheduled for March 11th at 3:30pm ET.
* Visit the K12 subgroup website [here](https://www.nist.gov/itl/applied-cybersecurity/nice/about/working-group/k12-sub-working-group).

## **Training and Certifications –**

### John McCumber, (ISC)2, Co-chair, provided the update.

* The group discussed the NICE Strategic Plan.
* There is a new project starting on best practices in training which is chaired by Mike Morris and Renita Mourini. Anyone is welcome to join the team.
* The next T&C subgroup is scheduled to meet on March 4th @ 2:30pm ET.
* Visit the Training and Certifications subgroup website [here](https://www.nist.gov/itl/applied-cybersecurity/nice/about/working-group/training-and-certifications-sub-working-group).

## **Workforce Management –**

### Susie Cone, IT Consultant, C0-chair, provided the update.

* The group brainstormed on the NICE Strategic Plan. They talked about diversity within the learning community and how to encourage a wider set.
* They also looked at the job description project and how it could dovetail into providing feedback to the NICE Strategic plan.
* They are discussing the production of a one-pager to provide guidance to hiring managers and HR and potentially creating a complimentary video.
* The next Workforce Management subgroup meeting is March 19th at 1:00pm ET.
* Visit the Workforce Management subgroup website [here](https://www.nist.gov/itl/applied-cybersecurity/nice/about/working-group/workforce-management-sub-working-group).
1. **Project Progress Reports -**

## **NICE Annual Conference**

Randy Pestana, Florida International University, provided the update.

* Save the date for the 11th Annual NICE Conference taking place November 16-18, 2020 at the Hilton, Atlanta.
* The second program committee meeting was held. The conference theme has been finalized: New Decade, New Solutions, and Meaningful Actions.
* The call for proposals will go out late March.
* FIU and NICE will have a booth at the [WiCys conference](https://www.wicys.org/conference) in mid-March.
* Find out more [here](https://niceconference.org/).

## **NICE K12 Cybersecurity Education Conference -**

Felicia Rateliff, Senior Program Manager, iKeepSafe, provided the update.

* The conference will be held December 7-8, 2020 in St. Louis, MO. They are finalizing a venue and actively recruiting sponsors and exhibitor tables.
* The call for proposals will open in April.
* The planning committee will kick off mid-March. They are recruiting people to participate in the committee. If you are interested, please send an email to: Conference@ikeepsafe.org
* Find out more [here](https://www.k12cybersecurityconference.org/).

## **CAE Community - No update was provided.**

1. **Summary of Action Items -** Meeting minutes and slides will be shared. If at RSA. Thanks everyone for your participation today.
2. **Next Meeting Reminder -** The next NICE Working Group meeting is scheduled for Wednesday, March 25, 2020.