**NICE Working Group**

**Meeting Minutes**

**Date: June 27, 2018 Time: 3:15 PM EST**

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

**NICE website**: [nist.gov/nice](https://www.nist.gov/itl/applied-cybersecurity/nice)

# Introduction and Ground Rules

* Danielle Santos, NICE Program Manager, welcomed members to the meeting. The NICE Working Group is setup to provide a mechanism for collaboration between academia, government and industry and to discuss strategies and actions to aid in cybersecurity workforce development, education, and training.
* During this meeting the Adobe Connect chat box feature should be utilized to provide feedback and ask questions. Interaction is encouraged during the meeting.
* Danielle noted that participation in the NICE Working Group (NICEWG) is not intended for advertising and promotional purposes and to keep this in mind when participating and using the chat feature.

# NICE Program Office Updates

* Rodney Petersen, NICE Program Director, gave the program office updates.
* June has been a busy month starting with the [National Cyber Summit](https://www.nationalcybersummit.com/) in Huntsville, AL held June 5-7, 2018. During this event the CAE Principal’s held a meeting and there was a CAE designation ceremony. NICE sponsored an education and workforce track.
* [CISSE Colloquium](https://cisse.info/) in New Orleans, LA held June 11-12, had keynotes and breakout sessions targeting cybersecurity education. Rodney provided an overview on the report to the President in response to Executive Order 13800.
* As a reminder, [3CS](https://www.my3cs.org/) will be held in Gresham, OR, August 2-4, 2018.
* The NICE program office just finished hosting the June webinar. The discussion was on considerations regarding cybersecurity education and training for the operational technology workforce. A recording can be listened to [here](https://www.nist.gov/news-events/events/2018/06/nice-webinar-cybersecurity-education-and-training-operational-technology). The next webinar titled “State Governments Pursuing New Tactics in the Ware for a Skilled Cybersecurity Workforce” is scheduled for July 18. Click [here](https://www.nist.gov/news-events/events/2018/07/nice-webinar-state-governments-pursuing-new-tactics-war-skilled) for more information and to register.
* Call for proposals has closed for the [NICE Conference and Expo](https://niceconference.org/) in Miami, FL, Nov.6-7, 2018.
* Rodney attended the [Summit on the Credentialing Economy](https://summit.saylor.org/). There are new and exciting ways to identify people who have knowledge and skills that can do this work. Also addressed was how to measure competencies and communicate them.
* The program office continues to plan for [National Cybersecurity Career Awareness Week (NCCAW)](https://www.nist.gov/itl/applied-cybersecurity/national-initiative-cybersecurity-education-nice/events/national) November 12-17. There are a lot of questions about pathways and credentials needed to be employable. NICE is invested in the topic of career awareness.
* There are a variety of administrative priorities we are working through including the follow up report to the President, the President’s management agenda, and the proposal to reorganize government. We also continue support of our ongoing programs closely aligned to the [NICE Strategic Plan](https://www.nist.gov/itl/applied-cybersecurity/nice/about/strategic-plan).

# Opening Remarks

## Industry Co-Chair Jason Hite was unable to attend the meeting. If anyone is interested in discussing the topic of HR and cyber professionals across various industries, reach out to Jason through his company email: jhite@daoinecentric.com.

# Standing Items

## **Strategy Stories**

* Lance Hoffman, George Washington University, spoke about “College and University Facilitation of CyberCorp (SFS) Scholarships”. This topic aligns with the [NICE Strategic Plan Objective 1.2](https://www.nist.gov/itl/applied-cybersecurity/nice/about/strategic-plan#Goal%201): Advance programs that reduce the time and cost for obtaining knowledge, skills, and abilities for in-demand work roles.

1. Word of mouth seems to be the most effective way applicants come to apply. Over the last fifteen years, students from a dozen different departments have applied.
2. GW has relationships with local community professors who spread the word to their students. Referrals also come from other sources such as OPM. Personal contacts are by far the best. Students and alumni are our best ambassadors.
3. There are ads in the online campus newspaper and flyers in various departments, but word of mouth seems to win out for getting prospects.
4. The [website](https://cspri.seas.gwu.edu/gw-cybercorps-scholarship-service) has a program description and an online application. The website encourages people to make direct queries that a student of ours handles.
5. When asked about state sponsored opportunities, Lance stated that some states have gone to the CyberCorp job fair and recruited. MD just passed a bill that looks like the program that will start on July 1.
6. For GW, in terms of women and minorities, graduation rates for women are about 40% or higher. We send students to women-oriented conferences and recruit from there. We also have relationships with some community colleges and 4-year schools such as in HI.
7. See presentation and find out more [here](URL:%20https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=504991) and [here](https://cspri.seas.gwu.edu/gw-cybercorps-scholarship-service).

## **Report Roundup**

## Nick DePorter, LinkedIn, spoke about the “LinkedIn Workforce Report”.

1. This report falls under research and data for impact.
2. The national section reports on three key areas; hiring, skills gap, and migration trends.
3. Hiring is up 4% compared to this time as last year.
4. Many industries are shown in the report.
5. There is a skills gap across the U.S. The report shows the cities with the largest skills gaps where you can drill down to see the workforce and go to respective cities to see the scarcity in the areas.
6. Migration shows cities that lose and gain the most workers. Austin and Denver show high gains and have remained on the report for many months.
7. Viewers can look at past work reports.
8. This is a monthly report trying to show a snapshot.
9. The data comes entirely from LinkedIn and is not tied in to [CyberSeek](https://www.cyberseek.org/).
10. Find out more [here](https://economicgraph.linkedin.com/resources/linkedin-workforce-report-june-2018).

## **Metric Moment**

## Rodney Petersen, Director of NICE, spoke about the Executive Order 13800: Growing and Sustaining the Cybersecurity Workforce.

1. The Department of Commerce (DOC) and the Department of Homeland Security (DHS) charged the community to assess the scope and sufficiency of efforts to educate and train the American cybersecurity workforce of the future, including cybersecurity-related education curricula, training, and apprenticeship programs, from primary through higher education, and provide findings and recommendations.
2. Four key imperatives, stating most of the recommendations, include launching a national call to action, transforming and elevating the learning environment, aligning education and training programs with the workforce needs, and establishing and leveraging measures that demonstrate the effectiveness and impact of investments.
3. Associated metrics to track success are needed to raise the quality of the cybersecurity workforce. The notion of measuring success goes back to the [NICE Strategic Plan](https://www.nist.gov/itl/applied-cybersecurity/nice/about/strategic-plan) and is included in the report to the President.
4. The Presidents Management Agenda contains a specific strategy on helping to create data that informs decision making.
5. Those that are tracking the college scorecard can perhaps be a model on ways to make data more accessible.
6. The Government Reform Plan and Reorganization Recommendations include strengthening evaluations by bringing evidence to bear and gathering evidence on what works and what does not.
7. See presentation attached and find out more [here](https://www.nist.gov/itl/applied-cybersecurity/nice/resources/executive-order-13800).

# Subgroup Updates

## **Apprenticeship**

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

1. Girish let members know the Apprenticeship charter was drafted and will be finalized in July. They are open to comments and suggestions.
2. The subgroup requests engagement for National Apprenticeship Week November 12-16, 2018. One core area the subgroup is focused on is the increasing deficit in cyber occupations. They are not sure if its job growth or increased work. There are currently 52 work roles in 7 categories within cybersecurity. The plan is to map to identify where the largest gaps are then connecting back to employers.
3. They look forward to additional feedback and ideas.
4. Those who are interested in joining should send an email to [nicewg.app@nist.gov](mailto:nicewg.app@nist.gov), or find instructions on the [website](https://www.nist.gov/itl/applied-cybersecurity/nice/apprenticeship-sub-working-group).

## **Collegiate**

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

1. During the last meeting, members reviewed the primary projects.
2. The Tools, Technologies, and Skillsets team is seeking sponsorship to help fund student fees required to access the [National Cybersecurity Student Association (NCSA)](https://www.cyberstudents.org/) portal. They are working on the white paper including an executive summary and process model describing the whole project.
3. To address students and employers, the academic pathways team seeks to identify pathways at collegiate and K12 levels.
4. They spoke about some evolving issues such as the NSA funded research project on faculty shortages which is well recognized. Who can teach cybersecurity topics is addressed in our recommendations to the President.
5. The group discussed student participation in Defcon and Blackhat to learn new skills and interact with professionals in the field.
6. Visit the Collegiate website [here](https://www.nist.gov/itl/applied-cybersecurity/nice/about/working-group/collegiate-sub-working-group).

## **Competitions**

### Laurin Buchanan, Secure Decisions, provided the update.

1. During the last meeting, a presentation on the [National Cybersecurity Student Association](https://www.cyberstudents.org/) and competitions was given.
2. Updates for the competitions one pager, describing what the subgroup is about, is complete and off to the graphic designers.
3. Podcasts on competitions are posting to [CyberFed](https://www.youtube.com/channel/UCqru5uPONxySBARWAmONQcg) YouTube and are now available.
4. For the upcoming June 28 meeting, Martin Carlisle, Director of Academic Affairs, Information Networking Institute Teaching Professor at Carnegie Mellon, will speak about [pico CTF](https://picoctf.com).
5. The co-chairs are working to identify team leads for the project teams to lead the efforts.
6. Other projects include recognition letters for competition winners, competition guides, and working on a proposal for the NICE conference.
7. Visit the Competitions website [here](https://www.nist.gov/itl/applied-cybersecurity/nice/about/working-group/competitions-sub-working-group)

## **K-12**

### Davina Pruitt-Mentle, NICE Academic Liaison, provided the update.

1. The subgroup is focusing on the upcoming NICE K12 conference scheduled for December.
2. They are also compiling programs for academic pathways.

## Visit the K12 website [here](https://www.nist.gov/itl/applied-cybersecurity/nice/about/working-group/k-12-sub-working-group).

## **Training and Certifications**

### Clarence Williams, NICE Government Liaison, provided the update.

1. The developed mapping matrix will be posted for public comment soon. Linda Montgomery, co-chair, is in the process of creating a survey that will be available on a web page.
2. The “Value of Certifications” one pager is in process.
3. The cyber range project team is developing a taxonomy and will be creating a one pager for outreach purposes.

## Visit the Training and Certifications website [here](https://www.nist.gov/itl/applied-cybersecurity/nice/about/working-group/training-and-certifications-sub-working-group).

## **Workforce Management**

### Maurice Uenuma, Tripwire, co-chair, and Susie Cone, IT Consultant and co-chair, provided the update.

1. The guidebook “Cybersecurity is Everyone’s Job” is in the final review phase. This includes a public comment period. The overall objective of the guidebook is to provide guidance to all within an organization. There are broad guidelines on how to build a cybersecure culture. Seven different functional areas are included, providing specific guidance on how to contribute to security posture.
2. The public comment period extends from now to the end of July.
3. To ensure there is an intended impact we are looking for input beyond ourselves including feedback from professionals that may not be involved in cybersecurity and from a variety of sectors.
4. Susie spoke about the survey on the landing page and a new [email address](mailto:wmguide@nist.gov?subject=Workforce%20Management%20Guide%20Book%20Comment) created to receive feedback.
5. After the comment period the subgroup will review feedback and update the document. The guidebook should be ready for fall activities to include National Cybersecurity Awareness Month in October, to distribute and share during the NICE conference, and to share with other such as colleagues, parents, friends, kids, etc.
6. Members can view the survey and download the guidebook [here](https://www.nist.gov/itl/applied-cybersecurity/nice/about/working-group/workforce-management-sub-working-group/workforce).

## Visit the Workforce Management website [here](https://www.nist.gov/itl/applied-cybersecurity/nice/about/working-group/workforce-management-sub-working-group).

# Project Progress Reports

## **CAE Community**

### Anastacia Webster, California State University, San Bernardino, provided the update.

1. The new CAE community website has been launched. Web training will be held through mid-July. The site is open to all users and we encourage postings on what the community is doing.
2. Training dates can be found on the calendar page.
3. The CAE virtual career fair takes place on October 5th. We encourage students to register.
4. The CAE Cybersecurity Community Symposium follows the NICE conference November 8-9, 2018 at the Hyatt Regency in Miami. Directions for submitting proposals are on the website.
5. Find out more [here](https://www.caecommunity.org/).

## **NICE K-12 Cybersecurity Education Conference**

### Davina Pruitt-Mentle, NICE Academic Liaison, provided the update.

1. The call for proposals is closed and are now out for review.
2. Registration goes live the first week of July.
3. Find out more [here](https://www.k12cybersecurityconference.org/).

## **NICE Annual Conference**

### Randy Pestana, Florida International University, provided the update.

1. The call for proposals deadline is July 1. The proposal committee will meet in early July and notifications will be sent by the end of July. Registration is expected to open in July.
2. The NICE conference and CAE symposium are both scheduled to be held at the Hyatt. Visit the website to block hotel reservations. Note that the CAE registration is separate from NICE conference registration.
3. To subscribe to get the latest information through email and learn more about the conference click [here](https://niceconference.org/).

## **NICE Challenge Project**

### James D. Ashley III, California State University, San Bernardino, provided the update.

1. During the [National Cyber Summit](https://www.nationalcybersummit.com/), the team talked about what this project provides to the community.
2. Content updates include three new challenges in the protect and defend category. These updates will be available in August.
3. They added 35 new curators.
4. Platform updates are will be live in the next couple of weeks.
5. There are updates to the challenge review section.
6. Find out more [here](https://nice-challenge.com/).

# New Business

## Jeff Weld, Senior Policy Advisor and Assistant Director, STEM education, presented on the “Emergent STEM Priorities and the new Federal 5-Year STEM Strategic Plan.”

1. The Federal Interagency STEM Strategic Plan expired last month. It included six priorities.
2. A performance assessment report was drafted last month and is under review. The plan was in the works for over six months.
3. Thousands of people have weighed in on this new plan.
4. They are processing data from yesterday’s summit.
5. There are many consistent themes relevant to the cyber workforce.
6. Within the draft plan, there are more fine point objectives that include the STEM education community and practices that should be implemented.
7. The 2013 plan was written by and for federal stakeholders. The new plan is more outward facing.
8. The plan hopes to guide federal investment in STEM education and be an outward facing document for stakeholders across the country.
9. Readers should look at the document through the lens as to what needs to take place. Note that the objectives are not in priority order.
10. Work based learning speaks to building networks and partnerships through entrepreneurship and education. Competitions is an acknowledged platform for increasing education and promotion of digital literature.
11. This document tries to provide simple and accessible objectives. Diversity is imperative and participation must be broadened.
12. There is ample research that the STEM knowledge pipeline is lost to the math experience. Objective eight calls out math reform to change to real world. An external advisory panel, made up of high end STEM educators, will be asked to comment on the pathway, metrics, and assessment mechanisms. There are three other objectives not on the list that deal with metrics.
13. Members who want to comment on the plan are typically groups collating feedback.
14. If you are a federal employee involved in STEM let Jeff know.
15. When asked if there is discussion whether this is a pre-K to higher education document Jeff stated there is a subgroup writing team integrating and prioritizing and reducing content to three overarching goals. The intent is to span learner spectrum from pre-school to adult reskilled.
16. Regarding funding or grants for 5013c organizations, the Office of Science and Technology Policy (OSTP) is not necessarily a STEM association but there are a lot of grants coming out of NASA, NSF, etc. A cybersecurity research and development plan is in the works to revamp as well. They are trying to closely link and align all objectives.
17. The draft document will be sent to all members.

# Summary of Action Items - The NICE Associates will send the minutes and presentations to all members.

# Next Meeting Reminder - The next NICEWG meeting is scheduled for July 25th, 2018.