**NICE Working Group**

**Meeting Minutes**

**Date:1/31/2018 Time: 3:30 PM EST**

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

# 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 workforce development.

# During this meeting the Adobe Connect chat box feature should be utilized to provide feedback and ask questions.

# 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, Director of the National Initiative of Cybersecurity Education, welcomed members to the meeting.

# The NICEWG agenda has been slightly altered for 2018. Standing Items have been reduced and combined to allow more time for presenting and discussion. Please remember members can always submit questions in the chat box.

# The NICE eNewsletter was distributed this morning. Members can subscribe to the newsletter [here](https://public.govdelivery.com/accounts/USNIST/subscriber/new?qsp=USNIST_3). Current and past publications are found [here](https://www.nist.gov/https%3A/www.nist.gov/news-events/news-updates/search%3Fcombine%3D%26term_node_tid_depth%3DAll%26field_campus). The current, winter 2018 edition, speaks to priorities for this year. Also featured is an example of how a cybersecurity professional and employer can use the NICE Cybersecurity Workforce [framework](https://www.nist.gov/itl/applied-cybersecurity/nice/resources/nice-cybersecurity-workforce-framework).

# In September, 2017, the NICE program office held a [webinar](https://www.nist.gov/news-events/events/2017/09/nice-webinar-efforts-align-training-and-certifications-nice-framework) that focused on employers use of the NICE framework. Additional past webinars include [writing cybersecurity position descriptions for the greatest impact](file:///C%3A%5CUsers%5Cesp1%5CAppData%5CLocal%5CMicrosoft%5CWindows%5CTemporary%20Internet%20Files%5CContent.Outlook%5C3CECQAGY%5CWriting%20Cybersecurity%20Position%20Descriptions%20for%20the%20Greatest%20Impact). Webinar recordings can be found [here](https://www.nist.gov/itl/applied-cybersecurity/nice/nice-webinar-archives). The upcoming February webinar speaks to the development of soft skills that are in demand by cybersecurity employers; a recurring theme from employers and based on feedback from academia. Registration for this upcoming webinar can be found [here](file:///C%3A%5CUsers%5Clah1%5CDocuments%5CNICE%2018%5CWorking%20Groups%5CNICEWG%20Meetings%5CJan18%5CDevelopment%20of%20Soft%20Skills%20That%20Are%20In%20Demand%20by%20Cybersecurity%20Employers).

# The program office confers on how we measure outcomes. While it is easy to count event attendees, people attending conferences, etc., we want to see what the outcomes look like. Do the results show persons getting jobs and are employers happy?

# We’re also approached by other countries open to opportunities for international engagement and plan to collaborate on resources and ideas.

# The NICE framework work role, securely provision, reinforces secure software and supply chain assurance. We plan to look at career opportunities and highlight how this fits into the framework as well as how this role fits into other industry such as automation and the IoT.

# Finally, a few upcoming events include:

# Women in Cybersecurity Conference ([WiCyS](https://www.wicys.net/)) scheduled for March23-24, 2018, in Chicago, IL.

# The [2018 National Cyber Summit](https://www.nationalcybersummit.com/) scheduled for June 5-7 in Huntsville, AL. The call for proposals is happening now.

# The 2018 NICE Conference and Expo will be held the second week of November. Details are being finalized.

# National Cybersecurity Career Awareness Week ([NCCAW](https://www.nist.gov/itl/applied-cybersecurity/national-initiative-cybersecurity-education-nice/events/national)) is scheduled for November 12-17, 2018. More details will be forthcoming.

# The [NICE K12 Cybersecurity Education Conference](https://www.nist.gov/itl/applied-cybersecurity/national-initiative-cybersecurity-education-nice/nice-k-12-cybersecurity) will be held December 3-4, 2018 in San Antonio, TX.

# Opening Remarks

# Industry Co-Chair, Jason Hite, Daoine Centric LLC, expressed enthusiasm about the opportunity to see how the efforts of the working groups are translated to government, academia and industry. Feel free to [link](https://www.linkedin.com/in/jason-hite-sphr-shrm-scp-735a3117/) to Jason’s profile if you are working with the framework and want help disseminating information.

# Standing Items

# Report Roundup Gary Davis, Sr. Director in Consumer Business, McAfee, presented on “McAfee Research Provides Insight into British Cybersecurity Skills Gap”

# Gaps in the cybersecurity workforce is a challenge this audience is likely familiar with. There is a dramatic increase in volume of attacks in government and Industry. The threat landscape and attack surface is growing exponentially. There is about a 15% gap in the workforce which is expected to increase. This statistic frames the problem.

# Gary believes the most lucrative avenue not explored are gamers. The trend is to take their efforts into cyber-attacking.

# A lot of these gamers take accessibility and tools to the next level - cyber-crime. Deciding how to provide an environment on how to be successful can engage gamers.

# McAfee launched a survey in the UK on the link between what is taught in schools and what would lead to a career in cybersecurity. McAfee studied more than 2,000 respondents. Results suggest the curriculum being delivered is not really surfacing the cybersecurity needs and filling that with interest.

# A local survey, looking at the use of devices, uncovered a gap in the way kids engage in devices and what they are doing with devices. Results may show how kids define and succeed in school.

# Find out more [here](http://www.information-age.com/uk-education-system-exacerbating-cyber-skills-gap-123468601/).

# Strategy StoriesPatrick Schultz presented on the Michigan Initiative for Cybersecurity Education (MICE). This effort aligns with the NICE Strategic Plan Objective 3.3: Facilitate state and regional consortia to identify cybersecurity pathways addressing local workforce needs.

# Patrick is a co-founder of MICE and a co-chair for the NICE K12 subgroup.

# To align and boost the NICE Strategic Plan objective 3.3, Patrick and his peers are working in MI to reduce the workforce shortage.

# The initiative started with three members of the K12 subgroup who have known each other for about ten years. Last year they attended a NICE K12 conference which opened their eyes on where to go in MI.

# Standards were drafted and a new program in CTE aligned to the framework was approved. We then needed to work through a way to broadcast the output and train the future workforce. The group ran a ‘train the trainer’ then went through a gap analysis to align and gauge “where we are”. After, the program was presented to the governor.

# The initiative has been working with colleges on state-wide agreements. They have run 6 trainings, teaching over 75 teachers and many students. Training is about 2-3 days. Did present at NICE K12 conference.

# Current initiatives include looking at multiple “train the trainer” events and a central repository for resources or a custom learning management system.

# This is not about reinventing the wheel rather putting resources in one place. MICE have worked with many others to embed all curriculum options in one location.

# Cybersecurity awareness is another part in all business areas as well as putting together tools that align with these areas.

# Certification preparation. Standards based.

# MICE looks at how computer science and cybersecurity are related. There is a focus on python, certification preparation, preparing for AP computer science and more. Talking to teachers about how principles relate to computer science which relate to cybersecurity.

# A course in the LMS has opened that all 9th graders will take on how to protect yourself online. The initiative is busy pushing this at the state level.

# They are working on importing/exporting data, a convenience for grading in a system. Also creating digital badges for students to allow a list to track performance and certifications.

# MICE have submitted proposals for regional training hubs to create multiple instances of training, specifically targeting rural areas. The hope is that these areas can join in with computers and their browsers.

# Finally, Patrick spoke of the top two strategic goals which are to develop, support and sustain a high-quality, prepared and collaborative workforce and to create a strong alignment with providers, community colleges, and higher education.

# See attached presentation and find out more [here](http://www.micek12.com).

# Metric Moment Angelica Dortch, Senior Policy Analyst, Office of the Federal Chief Information Officer, presented on the CIO Council Hiring Event and Metrics

# Angelica is a coordinator for the federal IT hiring and recruitment event. The event was held 60 days ago. Almost 2,000 people showed up for the event. There were 300 in-person interviews with over 50 job offers and are anticipating more.

# There was great turnout for the federal hiring process training presented to understand the federal government hiring process. There were also sessions on how to conduct interviews and resume writing.

# No dollars were spent on marketing.

# There were 72,000 site visits and over 5,400 people who applied across the job opportunity announcements. Once people apply, a cover sheet of candidates is presented. The event engaged over 200 hiring managers.

# CIO is happy with the corresponding metrics.

# To date, our hiring managers are inundated so it will take a while to get to all candidates.

# The event was delivered on-time and under budget. According to the survey sent, 80% of participating agencies felt it was economical and gathered a diverse group of candidates. The majority were satisfied and would participate again. The CIO is about a day away from reporting more metrics.

# Lessons learned include the need for a larger venue. Coordinating sooner to get the most agencies to participate and to get more candidates in so they have time to apply.

# The job announcement assessment is that it was too lengthy and to provide a shorter assessment up front. More time vetting up front, to conduct more interviews and make more job offers is also desirable.

# The CIO would like to host another hiring event subject to funding authorization.

# See the attached presentation for more information and find out more [here](https://www.cio.gov/hiringevent/).

# Subgroup Updates

# K-12

# Patrick Schultz, co-chair, provided the K-12 update.

# During the last K-12 meeting two presentations were provided. One from Matt Pronio who spoke about the online community, Nepris. The second was provided by Sara Hastings from the Department of Labor who informed the group about the work they have been doing on career pathways.

# The group is looking ahead to planning the next National Cybersecurity Career Awareness Week this November.

# Members provided a debrief of the 2017 K12 Conference and are now planning for the 2018 conference.

# They are continuing their work on the K12 report which is a culmination of all the projects the subgroup has worked on over the last two years.

# Collegiate

## Stephen Miller, co-chair, provided the Collegiate update.

# Academic Pathways Project team: Matt Pirko is putting together a graphic on an interstate highway model for academic and career pathways.

# Tools, Technologies and Skillsets Project team: Gus Hinojosa will be providing a presentation on the portal later in the meeting. Stephen has also found a volunteer to assist him with the white paper.

# Competitions

## Laurin Buchanan, co-chair, provided the Competitions update.

# There are several projects planned for 2018 to include:

# Writing letters to Competitions winners. Drafting the letters will start within the next month.

# Develop cyber competitions podcasts to address the full spectrum and echo system of competitions.

# Develop a Cyber Competitions Guide for both running a competition as well as for competitors. The subgroup will focus on what resources exist and use lessons learned on how to build out, test, and get local industry involved.

# Revisiting the [Competitions one-pager](https://www.nist.gov/sites/default/files/documents/2017/05/23/cybersecurity_competitions_2017.pdf) and potentially update the data to appeal to a more diverse audience.

# Next month, February 22, 2018, the group will have a presentation from Matt Pirko on student passports.

# Rodney inquired to what extent the group is discussing competitions in the workplace? Laurin confirmed that the group will be addressing this topic and researching ways to expand cyber competitions to include interest from more non-traditional players to work out some issues experienced in the workplace.

# Training and Certifications

# Linda Montgomery, co-chair, provided the Training and Certifications update.

# Training and Certification subgroup leads recently had a meeting to discuss what they accomplished in 2017.

# The subgroup agreed upon taxonomy at the first level and released a white paper. They released a mapping of certifications to the framework and identified strategies.

# The “Value of Certifications” one-pager was developed and will be available soon.

# The Skills Based Training project team will continue to identify various types of assessments: looking at KSATS at a more granular level and how to assimilate into the more appropriate models.

# The Framework to Certifications team will be sharing the mapping matrix for public comment.

# There is discussion about bringing back the Cyber Range team. If members are interested in joining this team, please let the co-chairs know. The idea is to look at different types of ranges, how does the taxonomy relate to the framework, and what the content is and how can it be used.

# The next Training and Certification subgroup meeting will be held on February 6th.

# Workforce Management

## Kristin Judge, co-chair, provided the Workforce Management update.

# The Workforce Managements subgroup has reviewed the first complete draft of the guidebook – The Cyber-Resilient Workforce, and have gathered some valuable feedback. Once all the feedback has been implemented the subgroup will present the information to the NICE Working Group.

# The plan is to have a deliverable finalized by the end of Q1.

# Project Progress Reports

# NICE K-12 Cybersecurity Education Conference

# Davina Pruitt-Mentle, NICE Academic liaison, provided the K-12 update.

# The K-12 subgroup are gearing up for the 2018 conference in San Antonio, TX from December 3-4, 2018.

# Some exciting contacts have been made in the San Antonio area such as with the Chamber of Commerce, the Technology Council, Oracle, as well as with local 2 and 4-year institutions.

# The committee is currently looking for an event location/venue.

# For additional information please see the attached presentation or visit here: <https://www.nist.gov/itl/applied-cybersecurity/national-initiative-cybersecurity-education-nice/nice-k-12-cybersecurity>

#  NICE Challenge Project

## Vincent Nestler provided the update.

# The NICE Challenge is a custom web platform that provides cyber workforce challenges from the perspective of the NICE Framework work roles. Challenges also map to CAE knowledge units. The platform provides year-round access for students before they get into the workforce.

# They have now increased capacity to 400 concurrent seats and the limit on reservations are going from two to four.

# The workflow user interface has been overhauled making it easier to use. Overall the project continues to grow and develop in its capabilities.

# There is increasing interest in adopting the project from various parties such as the Air Force as well as the State of Washington.

# The advisory board is now up and running.

# They are ensuring that the challenges are as real as possible.

# Find out more here: <https://nice-challenge.com/>

# New Business

# Gus Hinojosa spoke about the National Cybersecurity Student Association (NCSA).

# Gus is the Executive Director for NCSA and is a full-time student working on his MBA. Gus’ primary focus is to energize, expand and cultivate an ecosystem of next generation cybersecurity professionals through education, mentoring and professional development and through a diverse learning community.

# The NCSA is a program under the National CyberWatch Center and was formed in early 2016.

# The association is open to college and university students, 18 years of age and older, who are interested in cybersecurity education and careers. Some of the association benefits include: networking with other like-minded individuals; gaining access to a student member portal; participating in conferences, training and events on their calendar; monthly webinar series, and submitting resumes and connecting with sponsors who are actively seeking their next cybersecurity employee.

# Their student members are in 253 colleges and universities in 49 of the 50 states and growing.

# The NCSA is the largest and only cybersecurity focused student association in the U.S. It is student run and student focused to promote professional development.

# Gus then previewed the student portal for the audience. There is an annual cost of $25.00 to access the portal.

# Once a student logs in they are directed to a landing page which includes a plethora of resources. The resources are represented through different icons such as: Library, Resources, Cyber Competitions, Student Chapters, Monitories, Veterans, Women in Cybersecurity, Mentors, Security Tools, Employer Job Portal, Mentors, Job Portal, Blog, Calendar, etc.

# The site also includes a link to all CAE schools.

# The 13 student chapters also share information with existing clubs on campuses throughout the country.

# They are not currently coordinating with career and technical organizations.

# Members do meet up at conferences.

# Working professionals can support the association by volunteering on the advisory board or volunteer in other ways.

# See the attached presentation for more information and find out more here: <https://www.cyberstudents.org/>

# Summary of Action Items

# Please inform the NICE Program office about any upcoming events.

# Minutes and presentation materials will be sent to all members.

# Next Meeting Reminder – the next NICEWG meeting is scheduled for February 28, 2018.