

# Promoting Community College Programs Through Cyber Competitions

ICT Educator Webinar Series

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[00:00:00]

## Introduction

[00:00:00]

**STEVE WRIGHT:** Hello, everybody. This is the ICT Educator Webinar Series. This is where we try to bring the conference to you every Friday at 10 o'clock so that you don't have to go travel to all those expensive conferences and have to sit around at night with your friends, drinking... Well, no, that can happen anyway.

But it is difficult for people to make it to conferences. We've put on a lot of conferences, and we decided we would try to bring the best-of-the-best panel presentations through this new tool Zoom, and we try to get people to realize, at the same time every Friday, that they kind of get it in their calendar and focus on how to do things.



The ICT Conference Series (and you can see some of the ones coming up)... Today, we're doing the cyber competitions. We'll be looking at using LinkedIn to enhance your relationships with businesses. Then we'll be looking at our NETLAB+ User Group Meeting for technology for computer labs, then a job market update from the folks at Robert Half and the Creative Group side as to what kinds of Digital Media jobs are out there. And finally, Peter Coffee from Salesforce.com, who has always given inspirational talks about the future and what's going on, and we're calling

that our summer reading list one because it's the last one we'll do this spring before we roll into summer, and then we'll resume in the fall. All of these will be kept on our archives and promoted to everybody out in the field. So, thank you very much.

Now, today, we're going to be taking a look at what has been a rather unusual phenomenon. I'm not going to spend too much time, but I was there in the beginning when Teana and I went out and got coffee for some people at the competition at San Luis Obispo. We came back, and during that time we were there, a number of the people (faculty, deans, and leaders from community college CSUs and UCs) that were in the room had a meeting. We decided, "You know, we need some kind of nonprofit to head up this effort of Cybersecurity competition, someone that is not really bogged down with a particular point of view of one particular institution." Scott Young raised his hand and said, "I'll do that!"

From there on, this whole Cyberhub thing started moving. Teana, you came on and started getting the whole administrative... Oh, my gosh—it's got to be huge to get this boulder up the hill. We had a successful rollout. Liz, your background with San Diego and some of the stuff there, you've got an eye on what all of this could become, and I've already looked at the slide deck, so I know we're in for an exciting time. I'm not going to slow down.

Then Wendy Porter, our own Deputy Sector Navigator in the North/Far North is rather new to our team. This came along, and she embraced it wholeheartedly and has had incredible results in the North/Far North, which is a very difficult area for us, so I think it's a good example of how this kind of systematized approach can really help penetrate even the far reaches of northern California.

So, with that, I'm going to go ahead and turn it over to... Who is taking the lead?

[00:03:12]

**TEANA FREDEEN:** Let me share my screen, and then Liz will kick us off. As Steve mentioned, I'm Teana Fredeen, and Liz Fraumann just came on as the California Cyberhub Director. So, Liz, can you... Wait—hang on one moment. There we go. Can you see the screen OK?

[00:03:29]

## An Opportunity for Community Engagement

[00:03:29]

**LIZ FRAUMANN:** I can. Thank you so much. Good morning, everyone. Thank you for joining us this morning—really appreciate it. We're going to talk about California Cyberhub program, which is part of synED, which is the actual nonprofit that we all work and play for.

We're looking for opportunities to engage and just have fun. We're going to do a quick overview of what we're about, the organization, talk about some numbers in review from this wonderful California Mayors Cup that we had in February. I won't take Teana's thunder, but we had the entire state participating at once. We're going to talk about our VISION 1000 that's a view into the future, and we'll talk about other ways that we can engage with community college opportunities across California. So, we're really looking forward.

So, very quickly... SynED is evolving. We started out several years ago. We have some new programs, new opportunities, and you'll see the structure. Basically, we have...

- Report and research
- Programs
- Solutions
- Masters

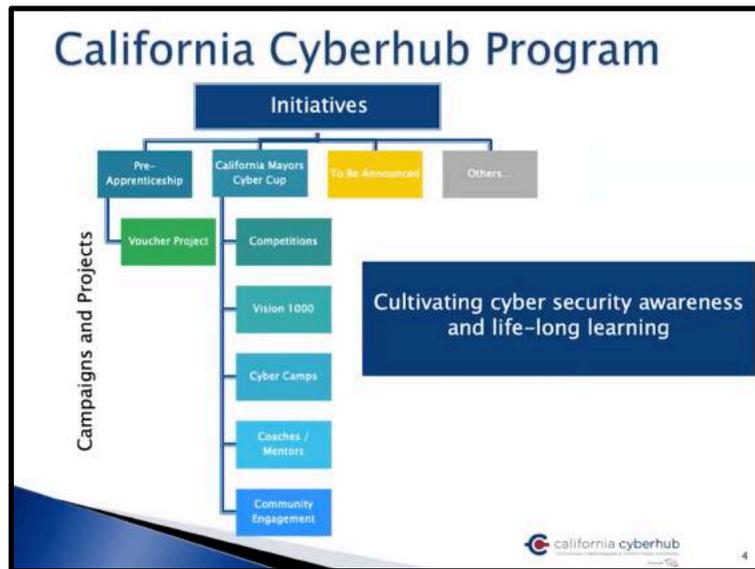
You can go to the website [synED.org](http://synED.org) and look more deeply into those.

Some of the very exciting things that we have...

- **Digital badging**, which is really taking off, and that provides a methodology for young people, students, anyone of any age, basically, to get digital credentials to place on their LinkedIn page, to talk about [00:05:00] things that they've been successful with.
- **Strategic planning and design** is another area of our programs.

- Then, of course, near and dear to my heart is the **California Cyberhub**. We're going to talk about that today.

## California Cyberhub Program



[00:05:18]

**LIZ FRAUMANN:** So, we have several different initiatives that are underway at the moment—some that we can't talk about because we're not ready to open that magic box and share them quite yet. But overall, everything that we do with California Cyberhub is to cultivate Cybersecurity awareness and lifelong learning. That is the underpinning of every single thing that we do, every single day—saving a soul each day.

- So, we have our **Pre-Apprenticeship Program**, and that ties into our CompTIA Program.
- **Mayors Cup**, which I think most everyone on the call has at least heard of, if not engaged in. So, if you are one of the folks that helped make that come alive this last February, thank you so much for that.
- Lots of **other competitions** and things that we want to have—capture-the-flag type things.
- Also, the **camps** that we're looking at doing—this could be another way that you all could engage.

- We also have some **formal training for coaches and mentors**, and that can be anyone in the community.

I guess that's the biggest piece that we're going to be stressing today, is that the California Cyberhub Program is all about the entire community coming together and helping raise Cybersecurity awareness and having everyone learn. Cybersecurity is a shared responsibility—not one individual, not one organization can take it all on. We all have a piece to play in that.

Teana is going to talk about the Mayors Cup. Teana, take it away.

[00:06:47]

## 2019 California Mayors Cyber Cup

[00:06:47]

**TEANA FREDEEN:** Well, we are so excited. In 2018, we ran the pilot program of the California Mayors Cyber Cup in Orange County, Sacramento, and... Gosh, I just blanked out on the location. Steve, help me out! Inland Empire—there we go.

But this year, we did 10 regions with 12 locations. Some of the regions piloted the option of doing multiple locations and connecting everybody together through a Zoom call, and that worked out really great. In fact, Wendy did that up in the Far North because the Chico area is quite a distance from the Eureka/Ukiah area, north of the Bay. 150 cities were represented and you can see the numbers there.

What's really incredible about the Mayors Cup is that it really brought incredible recognition across the entire state. Scott Young was up in Sacramento, and just the response from the state government... Amy Tom, the Director of Technology, showed up and said she was only going to be there for a short 15 minutes or so, and she ended up staying the whole time. People are really impressed. It really brought recognition to what these students are doing in cyber competition and the incredible skills they're learning.

Just a note—of the 12 locations, 10 of those were held on community college campuses, so this was a strong partnership with our ICT DM sector in the community colleges, and we're definitely grateful for their partnership in the effort.

### CMCC – Behind the Scenes

[00:08:28]

**TEANA FREDEEN:** A little bit behind the scenes... It was an incredible program that involved a lot of people. California Cyberhub did drive the CMCC this past year, and Liz is going to talk about

going forward. But the number of people behind the scenes... The coaches from the community colleges, the Green Teams who volunteered...

We had a great partnership with SynTech Global and their Haiku range team, who developed the competition. Amazon Web Services donated the support on their servers. The IT staff at the locations... All the groups just did an incredible job, so we appreciate each and every individual that helped out and made it a huge success.

We really are trying hard to really the get message out that Cyberhub is about the team as much as it's about the small staff that we have in the nonprofit organization of synED. It's really about the team and the community across California. I am going to pass it back over to Liz.

[00:09:36]

## VISION 1000

[00:09:36]

**LIZ FRAUMANN:** Thanks very much. Good recapture. Again, it was a community effort—I cannot stress that enough. We would not have been successful without all the players that we had, and that kind of dovetails into our VISION 1000.

This was a goal that we all came together with and said, “Because of the number of open positions across California [00:10:00] (37,000, approximately, maybe more today) that there are in the area of cyber alone, we need to help the students understand that there are pathways through the community colleges, through the universities, and maybe just certificate programs into this absolutely wonderful career field that touches everything from the high-tech industries to medicine to agriculture to government, etc.” Again, there’s a role for every single person when it comes to cyber.

We wanted to make the future a reality for these kids. There are lots of stories about students that have come from two generations of welfare. There was one specific gentleman—Blake is his name—that... Bottom line is, two generations of the family being on welfare. He decided to get involved in these cyber competitions.

Lo and behold, several years later, he was being offered an apprenticeship through the Department of Homeland Security. Next thing he knew, he was offered a scholarship to be able to take a job and work his way towards full-time employment. A couple years later, he ended up having his full-time work. He ended up helping to pay for his parents’ college. He ended up buying a house with his family, and then he ended up having his siblings get jobs in cyber as well.

The bottom line to that story is that Blake is real. We're giving these kids a hand-up, not a hand-out. What we want to do is enable everyone to be able to have that kind of success through working with them on understanding what they can do in the area of cyber.

So, we have a thousand teams that we're trying to have in place across the entire state of California by October of 2020. This was not something that we could do alone. This is something that's going to take every one of us getting involved in helping to, number one, share the ideas, share the opportunities and giving those students a hand-up to get involved in cyber and make our nation more secure than it is.

So, that's part of the vision, but again, we can't do it without everyone being involved. Our summer camps are another way to do this. We're looking for cheerleaders and people that are willing to host a camp for the kids. We have a playbook that's been produced, just about ready for primetime at this point, that you can put together here as a week-long camp for kids to come in and participate and learn some of the basic skills: the ethics that should be involved, the governance, and maybe some of the coding and capture-the-flag types of exercises. That gives them a foot in the door in understanding some of the fun things that can be done in addition to forming teams.

That's about 3,000 to 5,000 kids, and gosh, I forget how many students there are across California, but there are a lot more than that. It's less than 1% that we reach in that number of kids, so we're looking for community members (like yourselves) to help engage and help us reach that goal of our VISION 1000.

### Statewide Communities are Engaged

[00:13:08]

**LIZ FRAUMANN:** So, we're looking for the statewide communities to be engaged:

- K-12
- Community colleges
- California State

- University of California
- Government—as Teana mentioned, the Governor’s Office was represented at the Mayors Cup in Sacramento. They were extremely excited.
- Businesses (SynTech Global and Amazon Web Services)

Think about the business people that may even be some of your students at the community colleges taking those adult courses in the evening or weekends or whenever they go. The bottom line is that there are opportunities for them to engage with their employer to help share and allow us to reach our VISION 1000. It’s going to take everyone.

### CMCC 2020

[00:14:03]

**LIZ FRAUMANN:** So, looking forward to 2020, it’s going to be a little bit different for our Mayors Cup in 2020. We’re looking for communities to step up and help organize and help make the competition come alive. While we were extremely successful, as Teana shared the numbers, in 2019, we’re looking for these new teams, new students, and everyone to get involved.

If you would like to get involved and help champion a team in your particular area or region, or if you know a business that might be willing to, we’re looking for help. We’d like to start this by this October at the latest. You start to get teams formed, working together to help build the competition. We’re still in that planning phase right now.

[00:14:56]

## California Cyberhub Resources & Support

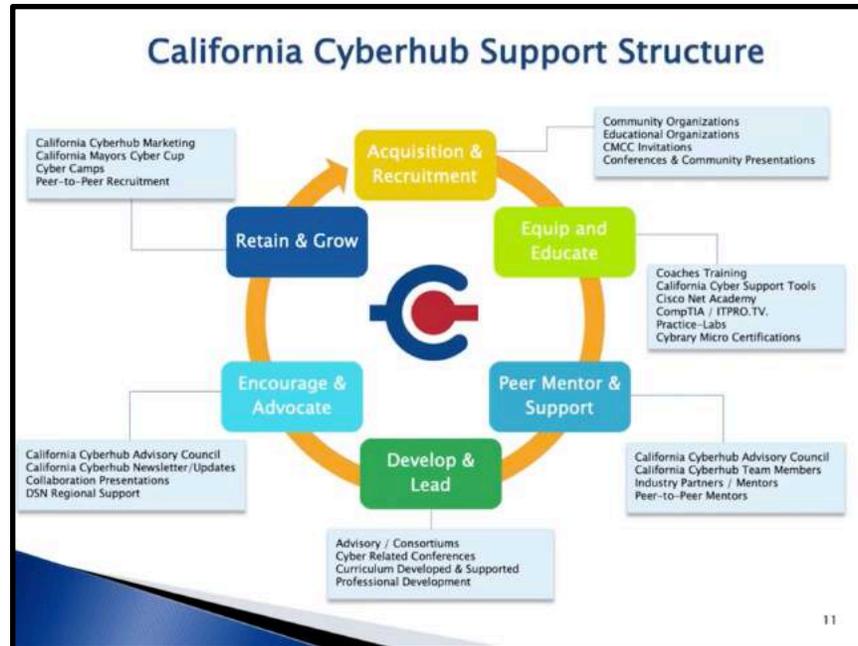
[00:14:56]

**LIZ FRAUMANN:** So, what might you need help with? [00:15:00] There are lots of different things on our website, and there is the support portal that you can go into. Bottom line is there are windows that you can click on. There are team resources. There are educational resources.

I think one of the most exciting things that we're doing is we're actually having one of our staff members work with the students, and they're producing videos on some of the cyber training. So, if you have students that are in your classes that have been involved in the area of cyber and they would like to do some videos, what we're looking for is that handshake between the high school and middle school kids to the community college students that say, "I'm in community college, but I still want to participate." So, there are lots of ways...

- Become a mentor
- Produce videos
- Help presentations

The bottom line is there's something for everyone to do, and you can see those things that are available on our website.



California Cyberhub Support Structure

[00:15:55]

**LIZ FRAUMANN:** So, here's some of the support structure that we have for you. We're looking to **Acquisition and Recruitment**. This is our community organizations to educational organizations. The Mayors Cup invitations, conferences—we're out there and about all the time, trying to make sure that people understand there's something that they can do.

We're not going to leave you alone and say, "Here, just go do it." We're going to make sure that you're **equipped and educated** and have time to be trained. There's coaches training and videos that will be done there. There are support tools that we have. The Cisco Net Academy, we're working with them, CompTIA, Practice Labs, Cybrary so there's more certifications there. Again, you're not going to be left alone and looking to for people to engage, but we're going to make sure that you have the tools to engage easily and well.

We also have a **peer and mentor system** that allows folks to be able to be part of our Advisory Council. These are people that have been coaches or mentors in the past, and they're happy to share their teams. Industry partners can also mentor, again, if you have a student that is

involved, or maybe you are an adjunct professor or an educator that way. Maybe your business wants to adopt a team with a particular school.

We're going to also help you **develop and lead** the entire process. Again, that's part of the Advisory Council and things that we can help you there with.

We also want to—as all teachers like to do—**encourage and advocate** for them. We have our Advisory Council again. Collaboration with presentations and the DSN regional support... Again, a shout-out to all the DSNs that are on the call. Thank you for helping make the CMCC 2019 what it was—it was a huge success.

And we don't want to lose. We will be building out to other areas and communities, but we also want to **retain**. We understand that there are a lot of handshakes and a lot of time that has gone into developing the relationships that we have, and we don't want to lose them. We want to stay involved with you. We want you to be part of the community as we go forward, and we're asking you to reach out further into your communities and help bring new people that can help make it more of a reality.

So, we're going to be having **marketing materials**. We'll have the Mayors Cup flyers that come out over the next few months. We also have these Cyber Camps and the peer-to-peer recruitment. If you know someone that wants to be a coach, wants to be involved, send them our way. It's easy—just send an email to our website.

### [California Cyberhub Competition Guild](#)

[00:18:42]

**LIZ FRAUMANN:** So, we're looking to... If you have been involved with the team in the past, we're wanting our teams to register on our **Cyberhub Competition Guild**. What this will allow us to do is make sure that we build things out and have an easy way to communicate with the particular coaches that sign their teams up that will allow for easy information for them, receive support information, updates, news, competition opportunities and timelines. We have a tight relationship

with the CyberPatriot group. We want to make sure that we have access to that, to the people that want to get involved in that, and access to the latest training and things that we have.

There's a particular **video** that you can look at online (I believe it's online—if it's not there now, it will be very shortly) with some of the CyberPatriot champion coaches. You're going to be able to hear them and what their experience is like. This is Allen Stubblefield. If you haven't met Allen—I've worked with him for years—he's with Troy High School. He is absolutely fantastic. It's worth time looking at that.

### State and Civic Partners

[00:19:54]

**LIZ FRAUMANN:** So, our state and civic partners... Local assembly offices—you can read the list.

**[00:20:00]** It's very exciting, what we're trying to do. I think everyone probably is aware that **October is the Cybersecurity Awareness Month**. We hope to have some wonderful things in place by this October to help promote some of the very basic things that everyone needs to know.

I would also like to open up... If you feel that someone you've been involved with deserves to be recognized as a **Cyber Hero**, send me an email (my email will be coming up shortly), and we're happy to put them on our list and consider them for promotion as a Cyber Hero for the state of California. It's really important that we recognize the people that have done so much, and we look forward to input from you. It's super important to us that... We can't know everyone. This where we're counting on you folks to be engaged with us and share that information.

[00:20:52]

## synED Offerings

[00:20:52]

**LIZ FRAUMANN:** Teana is going to talk about some of the other offerings within synED.

**TEANA FREDEEN:** I just want to take this moment to talk about some of the other programs. Liz mentioned our **pre-apprenticeship efforts** on the California Cyberhub, which includes the IT Fundamentals Voucher Program. This has been a huge success. It was launched by Steve Linthicum, the Deputy Sector Navigator for Orange County.

He had the foresight to, basically, drive a **program offering free vouchers to the students**, funded through the Strong Workforce funds, all the DSNs, and regional funds to provide vouchers to the students both at community colleges and in the high schools as their first entry into the certification market.

The wonderful thing about IT Fundamentals is that it has been CompTIA's only certification that they allow to be done through the **Proctor Anywhere Program**. So, they can give the IT Fundamentals exam in the classroom. In addition, teachers can proctor it, and cyber competition coaches can proctor it. So, it's been a really big success. We have an incredible success rate—over 85% in the middle school and high school and, of course, 93% in the colleges.

But the community colleges, if you're teaching an A+ class, this is a great opportunity for your students to practice taking an exam before they have to go off to a testing center to take their A+, and it gives them an introduction to what testing is like to help them get over those fears and, hopefully, increase their success rate when they go take their A+ exam. That's been a great program.

The other thing about that program is that if you have funding opportunities, there's an incredible matching opportunity on this to claim the **matching funds**. Practice Labs and ITProTV

really donate their labs at no cost, and CompTIA provides the vouchers at a significant discount—it's a great program.

The other thing that we're really rolling and has really taken off is the whole concept of **digital badges**. Digital badges are a digital visual indicator of something that somebody has achieved. What we are really driving with the digital badge initiative is credential digital badges. That means there's all the information behind that badge that says what somebody did to deserve it.

Santa Barbara Community College has their Career Skills Institute through the BWI program, and they do a 9-hour workshop where students learn how to interview, develop their resume, develop a LinkedIn profile, and at the end of it, they earn a Career Strategist badge. College of the Canyons is doing it in the South Central Coast... A lot of Paula Hodge's area in the South Central Coast has been implementing digital badges.

We're also seeing them at conferences, so instead of a paper certificate for faculty to take home to prove that they were at the conference, we can issue them a digital badge. So, if you haven't heard about them, please reach out to synED and Lee Yarborough, who is on the call, our Project Manager, can tell you all about the wonderful world of digital badges and how they're becoming more prevalent.

Just to comment on some of the other things that we're doing... Across a couple of the regions, we're helping develop virtual labs. Our position with synED is really a consultative company, so we come in, do strategic honing and design your teams. So, you guys get the small number of decision makers in the room, we walk you through a compression planning process that helps you to drive [00:25:00] down to some real actionable items, and then we help you implement those, and that's really what synED brings to our clients and our customers. There are a lot of opportunities there, and we just wanted to take the opportunity to remind you of what synED does at large, outside of its California Cyberhub initiative.

[00:25:21]

## Together We Will Succeed!

[00:25:21]

**LIZ FRAUMANN:** Thank you. So, again, the bottom line is that only together will we succeed. It's super important to us that we continue to build our relationships, that we continue to share communications and opportunities with each other, and again, thank you for all that you have done to help make us successful, and we look forward to helping make you successful in turn.

### Connect with Us

[00:25:52]

**LIZ FRAUMANN:** You can visit us or connect with us on Twitter, LinkedIn, or Facebook. I'm Liz Fraumann ([lfraumann@ca-cyberhub.org](mailto:lfraumann@ca-cyberhub.org)), and then we have Teana Fredeen, Operations Manager ([tfredeen@syned.org](mailto:tfredeen@syned.org)).

Steve and Nicole, thank you so much for the opportunity today. I don't know whether we have a questions slide, but we're happy to take any questions if someone has some.

[00:26:15]

**STEVE WRIGHT:** I had a couple questions, but then we want to go to Wendy and get her reaction to being a participant in a DNS with the program.

To clarify, a lot of links up there, a lot of people to call... *If I'm a community college faculty member right now and I say, "Hey, that sounds great—I'd like to see what I can do to set up a team," who do I call?*

**LIZ FRAUMANN:** You can just send an email to [director@ca-cyberhub.org](mailto:director@ca-cyberhub.org). That will get to us.

**TEANA FREDEEN:** Our website has under its resources a **How to Get Involved** page, and somebody can fill out the form, whether they want to start a new team or be a mentor, so there's a great, easy way. Same thing with IT Fundamentals. If somebody is interested in getting involved in the voucher program, they can go to our website and sign up on the website.

[00:27:04]

**STEVE WRIGHT:** My next question has kind of a season to this... I know there are camps going on now, and there are teams build, and then there's the final competition. *What does that look like seasonally? What's the drop-dead date for someone to get started with a team?*

**LIZ FRAUMANN:** Well, teams can be formed at any time, Steve. The bottom line is that the camps can go on any time, and what I'm proposing is that it could be an afterschool camp that takes them for a few hours. We've devised a camp format that is four hours long, so it could be done during a holiday break, a school break. It could be done on a weekly basis. So, we're looking at life-long learning through a continuum of whenever the kids have time.

As far as teams forming for the actual Mayors Cup in 2020, I would suggest they're going to want to be having their teams formed by this coming October so that they can make sure that they have skill sets working together as a team because that's super, super important in the area of cyber, right? No one can know all of it, whatever the 'it' is. So, it's learning how to work with a team, learning roles and responsibilities, discussing and realizing what they as a team have as basic ethics and things like this. So, that's really important, and that's why the coaches are important, and that's why we're probably kicking off...

In July, the training will be available online. We'll also have some opportunities to be able to do webinars for the training. Those are all viable options. It's a continuous cycle. The February event was a kick-off to what we're starting as a year-round activity.

[00:28:42]

**STEVE WRIGHT:** OK, so this summer, for preliminaries, but the team should be formed pretty much by October if they're going to—

LIZ FRAUMANN: We're recommended that, yes.

STEVE WRIGHT: Yeah, that coincides with Cyber Awareness Month.

LIZ FRAUMANN: It does.

[00:28:55]

## CMCC – A Far North Story

[00:28:56]

**STEVE WRIGHT:** That's great! Now, Wendy, you became a Deputy Sector Navigator within the last, I don't know, 12 or 13 months, something like that. You had an area up there that just didn't have any involvement in any of this stuff at all. You were starting with nothing.

**WENDY PORTER:** Yes, starting with nothing. It's funny—Liz says to get your team started a year in advance. I think some of our teams didn't get formed until two weeks before the competition! It was a wild ride, but it far exceeded my expectations. Do you want me to share some more information with you guys?

[00:29:33]

**STEVE WRIGHT:** Yes! How did that go?

**WENDY PORTER:** OK, so like I said, it far exceeded our expectations, and I'm happy to be here to share our story. We have a special place up here in the Far Northern California region. We're very remote, and we have small colleges. I am going to share...

So, to give you a little bit of history... [00:30:00] I actually run our tech startup incubator locally, here in Chico, and we also facilitate a tech industry partnership, which is called growTECH, and that has about 40 local businesses that have a stake in tech talent development. Through that group, we started developing relationships with education: Chico State, Butte College, and K-12 schools.

That's when I got to know the DSN role. My predecessor retired last June, and the team over there talked me about the programs that the DSN is working on and how much impact they're having in connecting industry with the community college system. I kind of fell in love with the role and decided to give it a try, so I came on board at the end of July last year.

This experience has opened my eyes to the Cybersecurity workforce shortfall that we have. I got to know Cyberhub at some of their presentations at professional development opportunities and really liked what they were trying to do with the California Mayors Cyber Cup, but I didn't think that it was going to be feasible for me to pull it off in the timeframe I had.

To kind of give you some perspective about the Far Northern area and tech education, we've done really well with our elementary schools in exposing to STEM and STEAM education and getting them on board with Hour of Code programs, Girls Who Code programs. What's happening is they get into high school, and there's nothing for them to do. There's nothing for them to explore their interest in technology. Some schools are obviously better than others, but overall in the Far Northern area, it's very lacking in the high school. So, I saw the Cyberhub California Mayors Cyber Cup competition as a way to change that and to get something going.

### Far North – First Time Competing

[00:31:59]

**WENDY PORTER:** Like I said, CMCC... I said, "No way! I'll do this next year." But Teana was really good at talking me into it, and we went for it. We went for it, and for me, particularly... I have a very strong relationship in Butte County only. So, for me to get in front of all of these 7 other community colleges in the Far North and to try to touch base with all of the middle schools and high schools in that large, large region, it was quite challenge, especially in such a short amount of time, but we were able to pull it together.

10 teams competed at Butte College, and 7 teams competing at Mendocino College. I have to give kudos to Edwin Kang, who is a high school teacher in Mendocino. He was just phenomenal in driving the efforts over. I couldn't have done it without him. He was actually recognized as a Cyber Hero, so yay to Edwin!



If you look at the circle on the map, it's a large area. These 7 colleges are very far spread apart. There are hours driving between each. We pulled it off with a lot of work. Here are some pictures from the competition at Butte College.



We did do a Zoom conference with Mendocino, and it worked out pretty well. There were some hiccups we're going to get better next time. I wanted to point out they had a lot of little details that they wanted us to put together for the CMCC: getting the t-shirts, making sure there were IT volunteers, having balloon art, doing the DJ and all this music.

It seemed like a lot to put together, especially since we were so rushed, but the day of the event, I saw why. It was really awesome. The kids loved it. All those little details really made the day wonderful.

## Amazing Results

[00:33:57]

**WENDY PORTER:** Besides that, we were hoping for some great results, but it was so much better than I could have imagined. We were able to get community members there and government there the day of, since it's an all-day event, and then the students were in the competition for most of that.

There was a lot of **relationship building** that happened during the event between faculty from elementary schools, from middle schools, from high schools, from community colleges, from Chico State, and from the community members. So, just by bumping into each other and getting to know each other, that was a huge win. Even if that was the only thing that happened, I would have been happy with that.

So, now what's happening is we actually have a high school in Mendocino and a high school in Butte County that are working on **articulating classes with their community colleges**. So, that's really cool! And the relationship that got developed with the Cybersecurity professor at Chico State [00:35:00] and our Butte College professor, they got to talking, and they're working on some transfer options. Even though Chico State doesn't have a degree program for that, they're still trying to figure out how to transfer those classes over into Chico State—that's David Zeichick that's the professor there. He's also working with College of the Redwoods to do the same thing, so I'm just super excited. This cross-regional communication is pretty amazing.

Then the other piece, obviously, is the **pipeline** that this has been creating for the community colleges. So, to see the students actually on campus, they say, "Wow, that's what's being taught here! I want to go here!" Especially, they got to rub shoulders with the community college students. A lot of the mentors and the IT helpers were Cybersecurity students at either the community college or Chico State, so that was really good as well.

I mentioned **community engagement**. Like I said, we had the mayor or Ukiah present at the Mendocino competition, and our City of Chico mayor also. We had our City Manager. We had a lot of county office of ed people. They were blown away. It's a similar story that was mentioned—they were only going to stay for a little bit, and they ended up staying for a lot longer and actually brought their kids, too, which was cool.

Randall Stone, the mayor at Chico, he came up to me and said, "This is amazing. I'm so glad I came. There have been many, many efforts to put something like this together to expose the value of tech education in our community, and I've never seen anything that's been done that's this wonderful." So, that was really good feedback to hear. It made all the hard work worth it.



So, my favorite story, though, is the student success. This photo is the winning team Core Butte presenting the trophy to Randall Stone, our city mayor, and after this little ceremony, one of the parents came up to me and said she was so grateful because her son had never won anything. He wasn't into sports. I'm going to cry—this is so embarrassing! I practiced this a lot, so this wouldn't happen, but it really was emotional. That was just so good to hear, really good stuff.

[00:37:24]

**STEVE WRIGHT:** Well, right from the beginning... It's wonderful to hear your story, but right from the beginning, when I first heard about these cyber competitions through CyberPatriot and so

many other forms, I was struck by three things. One was that you pretty much have to beat the kids with a stick to get them to go home that night.

**WENDY PORTER:** Yeah.

**STEVE WRIGHT:** They like it so much! I've seen a lot of student engagement things. There's something about the competition and the timeliness of this. Maybe it's a magic moment for this, but it seems to work.

The other thing I've noticed is, when you start telling the story about it and what it is to educators or legislators, the first thing they do is put their kids in a program. It's automatic! "OK, I'm going to start coaching—I'm doing one myself." And that's when you realize the personal stake is high.

**WENDY PORTER:** Right.

**STEVE WRIGHT:** And, of course, the third thing is reflective of what I heard of the first competition I went to from Northrop Grumman is they said these are the employees that we want. They can work on a team. They can be on a computer. They're dealing with, in this case, cyber issues. The whole idea is the integration of the computer and the team and working together and getting things done.

So, there are at least three major points there in terms of personal, family, and industry involvement, and I think that Cyberhub has done just a spectacular job of trying to systematize this because I know the community colleges are notoriously difficult to deal with because we have 114 separate fiefdoms. It was originally set up that way on purpose to keep us decentralized so that you wouldn't have a Chancellor's Office telling everybody what to do (and perhaps wrongly), so there's some wisdom in that, but it does make it difficult, and my hat is off to you, Teana, for the wonderful job that you've done in organizing this and getting everybody to follow on.

And Liz, I take it that your responsibility is going to take this nationwide, too. Is that right?

[00:39:26]

**LIZ FRAUMANN:** That's a hint in the future, yes, Steve! Yes, maybe even around the world. In fact, Scott and I were chatting the other day about going to galaxies beyond, right? So, again, we have to dream big. We'll take it in baby steps, but the opportunities are huge.

**TEANA FREDEEN:** I'd like to just add something, too, from Wendy's presentation... We have tried to communicate as much as possible that the California Mayors Cyber Cup was just the kick-off [00:40:00] of an annual effort. It did exactly what we wanted it to do. It brought an awareness, recognition, and vibrancy around this concept of Cybersecurity education through these competition teams.

And the relationships and the effort is exactly what Wendy has seen now, is that now she can take that forward and move it forward, building that community and finding those cheerleaders, like an Edwin Kang, finding the influencers in your community, and starting to engage them.

I was at Long Beach, and we had a small number of corporate people there, but every one of them really got it. So, now the important thing is to take that momentum and keep it going. People see that it's not just the event itself—that event was the kick-off to bring awareness to the community.

[00:40:57]

**WENDY PORTER:** I forgot to mention, too, we have three new businesses that were added to the advisory board for Butte College for their ICT programs, too, from this effort, and there was a lot of discussion in the last advisory board about how they can get more involved. We have five camps that are now starting this summer in five different counties, and we'll be using the IT Fundamentals voucher program to advertise for this and advocate for new team creation as well.

Our tech partners and industry partners were so thrilled to see this competition-based learning happening for the same things that Steve mentioned about getting to work in a team, working under pressure, so it's pretty wonderful. I have a few more pictures, if you guys want to...



Up in the left-hand side, that's our Assistant City Manager, and that's Linda Fischer, who I think should be recognized as the Cyberhub person. She's the professor at Butte College that has bent over backwards to make this happen.

On the right-hand side, that is the highest scoring middle school team that competed.

The bottom right is our mayor walking around with his kid during the competition.



The famous balloon arch! On the right-hand side, these are our industry partner leaders. We have the CTO of Lulus. We have the Lead Engineering Manager from Build.com. We have the

IT Director from Enloe Medical Center, and we have the CEO of MATSim and ISIM IT services. So, it was really good stuff!



And these are the winning teams. The second place was in Ukiah, the mayor is in the middle on the left-hand side with the second-place high school team, then Core Butte on the right.

[00:42:48]

**STEVE WRIGHT:** You know what's especially noticeable to me (because I've seen pictures from all the different locations, and I was at College of the Canyons) is this looks like all of them!

**WENDY PORTER:** Yeah!

**STEVE WRIGHT:** A lot of teenage kids, and they're excited. This consistency of the product that you guys brought to this to allow it to look so similar in all the different locations allowed for a shared experience, and I think you're correct, Teana, that you just sow the seeds for what's yet to come.

What Wendy has experienced up there and what will probably happen next year will be bigger and better—the advisory board, the articulation—and of course, separately, we have the news that these courses that we promote that are relevant to this now articulate to National University and Western Governor's. We could allow a full pathway for these students if they're interested in IT and Cybersecurity. That really wasn't around two years ago.

So, with this kind of program, the funnel is building. The community colleges have the courses, and the articulation exists for higher degrees if they want it, which is very good for this kind of field. I just think it's terrific.

[00:43:56]

**TEANA FREDEEN:** If I could make one more comment, too... We're really pushing this concept of VISION 1000, but Paula Hodge was another one who said, "No, maybe next year. I just don't have the teams. We can't pull them together." I think within the last month, they both just did an amazing job.

But where Paula Hodge had success is she has another huge area from Paso Robles all the way down to Ventura. They reached out to the Boys and Girls Clubs, really getting the concept of cyber teams outside of just the high schools and middle schools and the education system.

But really, look into your community group—Girl Scouts... I mean, think the Inland Empire from the 2017 CMCC had 40 Girl Scout troop leaders come to cyber coach training, and they've started teams. The Boys and Girls Clubs down in that Ventura County area came in plenty. A bunch of new teams started up out of Boys and Girls Club. [00:45:00]

The United Way, we're working with them, so keep your scope open and just really think as broadly as possible and outside the box for how we can get more students into these pathways and coming into the community colleges.

[00:45:15]

**STEVE WRIGHT:** Well, certainly, for the community colleges, there's a financial interest as well. We have a goal in our new funding apportionment formula to improve the flow of students from high schools, especially in equity-challenged areas and things like this, and this is the perfect kind of cohort-building, excitement-building awareness of STEM that will get them in and into our classes. So, from that kind of perspective as well, it's good.

**LIZ FRAUMANN:** It touches everybody, yes.

[00:45:45]

## Wrap Up

[00:45:45]

**STEVE WRIGHT:** There are a number of people on this call. You can always write your questions in the chat or feel free to speak up now if you have a question that you would like answered. I'll give them a moment. I should have asked that earlier—it's part of my job as the emcee here to get that stuff going.

Like I said, we're going to be archiving this on our website and promoting it. I think it's a good kick-off for what you guys are going to be doing this fall. If you allow any materials that you want specifically for the community colleges to be hosted on our website, we would be happy to do that, as well linking to you.

All right, well, in the absence of any other questions, are there any final comments that anybody wants to share?

[00:46:33]

**LIZ FRAUMANN:** Just thank you so much, Steve and Nicole, again, for having us today. We really appreciate it. We look forward to continued relationships and building on them.

**STEVE WRIGHT:** Yeah, it's a great partnership. Thank you very much. I look forward to it. All right, everybody, that's it for today. Teana, thank you.

**WENDY PORTER:** Thanks, everyone. Bye-bye.

## Additional Resources

- [Find out more](#) about what synEd is doing to help cyber pathways for students
- Connect with [Liz Fraumann](#) or [Teana Fredeen](#)
- [Start a cyber team](#) at your community college
- [Learn more](#) about the California Cyberhub