

**Cybersecurity Education Management Council (CEMC) Meeting**  
**September 17, 2020**  
**1:00 PM**

**Committee Members/Representatives Present**

Commissioner Kim Hunter-Reed  
Tavares Walker  
Daphne Williams  
William Bradley  
Nathan Corley  
Brian Landry  
Les Guice  
Susana Schowen  
Greg Trahan

**Staff Members Present**

David Lafargue

**Committee Members Not Present**

Rick Bateman  
Gabriel Fagbeyiro

The first meeting of the Cybersecurity Education Management Council (CEMC) meeting was called to order at 1:00 PM by Dr. Kim Hunter Reed, Commissioner of Higher Education. Dr. Reed thanked everyone for their service and stated that this new Council sits with the Louisiana Board of Regents and we're glad to have another important council with us. She introduced David Lafargue who leads our STEM work, and he will be staffing and supporting this initiative as well. Dr. David Lafargue did the roll call and determined that we have a quorum.

Dr. David Lafargue provided information about Senator Abraham and his vision. Due to his attendance at another meeting he was not available to attend this meeting. Dr. Lafargue informed the council that Senator Abraham is working with the Department of Administration to identify possible funds for cybersecurity. Senator Abraham explained his intent for this council is to establish the criteria for an RFP to be distributed for higher education entities in Louisiana. It would be up to this Council to assess the applications received and make recommendations to the Board of Regents on how they should be funded and what programs should be funded. Dr. Lafargue asked Senator Abraham if there was a limit or cap on the funding and how the funding was supposed to be distributed. He responded there was no cap set for the funding, it could be one large award or multiple smaller ones, but that would be left up to the Council to decide.

In regard to what is the best way to actually expend those funds or the best use of those funds, the Board of Regents (BoR) will track that information from the programs that are awarded. They will track how many graduates actually come out of a program(s), the proposed outcome, and the return on the investment. Senator Abraham extended his gratitude for everyone participating in this and wished that he could have been here.

Dr. Reed thanked Dr. Lafargue for his great job of summarizing and indicated to the Council that a copy of the actual legislation and cliff notes were in their meeting folder for their reference. The legislation was tasked with creating a fund and creating this Council. The goal is to expand the cybersecurity programs, offerings, and alignment to the workforce. Also, making sure that this Council informs how we grow those programs, how we prioritize programs, and how we align with the workforce. The challenge of trying to report to the legislature what is the return on the investment, how do we translate programs to employment to return on that based on that investment, what does that look like, and how do we annually report that to the Senate Committee on Education, the Senate Committee on Finance, House Committee on Education, and the House Committee on Appropriations once

funds are established. It also states that this Council will meet quarterly and within this meeting, we need to elect a chair and vice-chair.

The council members were asked to introduce themselves, share what their role is on this Council, and their vision or expectations of this work as we think about how to build an education management council that is responsive and effective in our work. Also, I would like for Dr. Guice to share his title, what he thinks about this work, and what he does that connects him to this work.

Nathan Corley – STEM Specialist with the Louisiana Department of Education. The primary focus of my work is managing our high school pathways. We provide a CT like experience for students, whether they are seeking students or not they get innovative focus coursework in engineering or cyber security or coding or whatever that may be. I am charged with giving these opportunities to kids around the state. My vision for this Council is to make sure that these kids have these experiences, and have this exposure, that they have quality programs to feed into and, after high school, they can then turn into employment and ultimately boost our economy and maybe change their family trees.

Brian Landry (proxy for Greg Bowser) – Vice President of Political Affairs at Louisiana Chemical Association (LCA). An individual within our organization has semi-retired and I am filling in that role, which is our security committee.

Tavares Walker (proxy for Secretary Ava Dejoie) – Assistant Secretary for the Office of Workforce Development within the Workforce Commission. To put it as Secretary Dejoie always puts it, our job is to put people to work. We have various modes, modules, and programs that we offer. Those technical skills are used to build up a workforce so they can actually go to work and learn a trade or career.

Greg Trahan – Director of Economic Development at LSU. Previously I spent 12 years with a tech startup. It was a startup, and we grew and had a successful exit. I worked on a lot of technology projects. My role was to recruit tech companies to Louisiana Economic Development (LED) where I had the good fortune of working with Dr. Guice. In my role at LSU I work on a lot of different technology projects, including some cyber projects with the Department of Defense. There are a lot of faculty that work on this, so I've had the pleasure of engaging with Mr. Bradley on occasion with the Cyber Security Commission and Dr. Guice. LCA know well that it is not necessarily the problems you describe, and it is not necessarily an IT person that you need to prepare. It is a very specific kind of skill set that we are going to need to prepare our technologist for the future across Louisiana's industries to do that.

William (Bill) Bradley III – Retired - Chief Information Officer for a national security organization. Since I retired, I have begun doing some consulting for Origin Bank in Ruston and also for the Air Force in Lincoln Parish. I think this is a real opportunity and I know that the jobs cyber brings are coveted jobs and typically are jobs that people stay in for their career. There is a continued demand for those jobs. One thing we can do is create more talent, special talent. It is very important.

Susana Schowen – Director of Workforce Initiatives for LED Faststart which is the Workforce Development Division of Louisiana Economic Development. We are focused on building resilience in our economy and that means diversifying the industry and next Louisiana. We also recognize that there is no resilience without security and that makes this an incredibly high priority for us. We are also focused on ensuring that the benefits of economic crisis that happens in Louisiana are shared broadly among our members of our communities. That requires a new round of changes to education and training that allows people from a wide variety of background origins to get into the best jobs. We know the jobs that we are talking about right here are indeed some of those best jobs and will continue to grow and offer great opportunities for people. The challenge that I see for an organization like this is the temptation to silo things very narrowly and I want to make sure that we are being very careful about that.

Daphne Williams – Associate Professor at Grambling State University. I teach in the Department of Educational Leadership and Doctoral Education and Master of Science courses and programs in developmental education. Grambling has a cyber security program that I am very interested in, as Ms. Schowen indicated, in expanding the diversity of the workforce in terms of cybersecurity jobs. I want to be able to expand these opportunities to those populations who have not been included thus far.

Les Guice – President at Louisiana Tech University. I have been a professor and administrator for 42 years there. The last half of that career is Dean of Engineering and Science, Vice President, and President. We have been looking at growing a talent base that are putting educational programs in place that will allow our students and graduates to stay in Louisiana with jobs. We have been very externally focused as an institution, at having support companies like Century Link and others to get the talent they need to stay in the state. I do work a lot across the state, but we're focused on the I-20 corridor along with Sowela, Daphne, and Grambling to really create some special opportunities and its been focused largely in the cyber arena. Louisiana Tech had a computer science program for years and it has kind of sat there with not real high enrollments. In 2013 we put a cyber engineering degree program in place that leveraged a lot of computer science and now our numbers have tripled and quadrupled. It is attracting students and the students now are staying in Louisiana. They could go anywhere they want in this country but, we are having more of them stay here. The Governor asked me to serve on the Cyber Security Commission that he established and I was able to chair the workforce education and public outreach committee of that and, hopefully, some of that work will help inform us here.

Greg Brower – Louisiana Chemical Association – My colleague, Brian Landry, is going to be the one who actually sits on this Commission, but being it was the first meeting of this Commission I wanted to attend in person. I did want to come by and be a part of the first meeting and, as I said, Brian is going to be sitting in and working. Brian is our security expert and cyber expert at LCA, so all of our stuff runs through him. A number of our companies are working very hard each day on cyber security because of all the hacking things that happen. So, Brian is the point person whose committee handles all of that for us and for all of our 65 member companies.

Dr Randall Brumfield joined the meeting and introduced himself. I am the Deputy Commissioner for Strategic Planning and Student Success. I work with Commissioner Reed and Dr. Lafargue.

Dr. Reed thanked all for sharing how they came to this work and their background with all their talents and that they will certainly enrich the work that we're going to do and help make sure we're spot on as we advance in the cyber ecosystem in our state and workforce. She transitioned to this cyber security overview. Dr. Guice and Susie Schowen were invited to share a little bit, a sort of table setting for us around this work. She introduced Dr. Guice.

Dr. Guice provided a presentation that he previously made for the Louisiana Cybersecurity Commission and to the Governor, to report on the Educational Workforce Development and Public Outreach Committee. This presentation helps to inform where we are going as a commission. It provided the mission of the Louisiana Cybersecurity Commission and their goals. The presentation also included information about cyberattacks, and the complex infrastructure and industrial base in Louisiana which are prime targets for cyberattacks.

Dr. Guice stated the key findings for Louisiana and the nation is the huge cybersecurity workforce gaps. Our people are getting out making huge salaries. If we are going to do this, we also must think about the education and how we sustain that over time. But we do have a strong foundation of programs all across the state. About two and half years ago he put together this report and talked with all the universities and community colleges and basically, they have a list of the programs that all of these different universities offer that are cyber related. We can refer to that as a starting point on some of these discussions. One of our challenges is, just like for anything in Louisiana, we are scattered across the state and we have different cultures, networks, and different areas so, how do we bring all of this together? The real benefit of this capability can be what we believe that taking a more regional approach is what is being done with the LaSTEM Council. I believe it is a way to do that. We are going to have to take advantage of under-utilized workers, people that are not in the workforce now and there are great pathways to get people like that into cyber kinds of jobs. Obviously, we have got to diversify that workforce or we're never going to be successful

in achieving our goals for the state and for the nation. We do not want to skip over the K-12 schools because it essentially starts there and must be integrated with those activities. This is not coming in one end of a pipeline and coming out the other end. There are all sorts of entry points into this cyber workforce pipeline and there are all sorts of exit points. Some people may start at K-12 and go all the way through the graduate degree or they may start in on a two-year degree and then exiting even before completing that and going to work in a cyber job where they continue to develop those skills and ultimately come back and complete those degree programs.

What we had proposed at the Commission level, and presented to the Governor, at his request, were:

- Funding categories proposed
- Faculty and teacher recruitment and retention
- K to 12 pathways
- Programs and pilot programs
- Cyber infrastructure that needs to be developed
- Program Development, more curricula for different institutions for different kinds of work opportunities
- Summer camps that inspire K-12 kids to get into this
- Certification programs
- Scholarships
- Internships
- Establishing centers of excellence

We need to see more centers of excellence emerge across the state and if we do a regional alliance approach, the regions will work together regardless of whether we formally include that in any of the programs at the commission, they will work together.

I think it is important to acknowledge the committee members because there was representation across different universities and community colleges over several months. The Cybersecurity Commission proposed a typical structure and they worked together and, hopefully, the Cyber Commission will continue to be a liaison for all of the things at federal level and the state and regional level for cyber security.

Dr. Reed recognized Susana Schowen. Ms. Schowen indicated that she does a workforce supply and demand gap analysis every year but, this year it is not realistic to put forward a set of forecasts the way we normally do. This year, generally speaking, it shows that we have major under supplies in highly skilled technical STEM intensive fields, not a surprise to anybody. Ranging from skilled crafts to process technicians to engineers, computer scientists, and cybersecurity professionals at the very top level. This is nothing that anybody around this table is going to be shocked by but it is useful because it provides some quantitative estimations of what the problem really looks like. It also helps to make the case of many of our public officials and some of our education folks that these under supplies have to be addressed. We first have to ask why these under supplies exist. We have raised the issue of K-12 education and we know that when folks come into our higher education institutions they are often not well prepared. To excel in a highly challenging STEM intensive major and graduate within the expected two to four to five years, depending on the program, and we also talked about issues of equity. Many of these folks that come in, that are experiencing less than ideal preparation are, in fact, the folks that we really want to encourage into these fields and help to pull through to success on the other side. So, we do have issues of equity that need to be addressed there as well as at the K-12 level.

When we look at our higher education institutions, it is also no secret to anybody that there have been some real challenges with funding over the past several years and we know that there have been restrictions. Funding, particularly in times of tight finances, institutions feel a pressure to ensure that they are meeting their graduation rates, that they are getting people through to completion. They are doing so in an economical way that these STEM intensive fields are challenging, but, there's another factor there and that's attracting high quality faculty. These fields are significantly under supplied in the private sector which means that you have to pay those folks a lot of money to be competitive. So, essentially, you have programs that are challenging for students to complete. They

are coming in, in many cases, without the K-12 preparation that will set them up for success. These programs are expensive for schools to offer because the faculty are expensive and they require things, like lab time, which is an extra expense, software licenses and similar things. So, we've set up a system with an incentive to encourage our postsecondary institutions to put as many students as possible through essentially cheap unchallenged, but not really market driven degree programs in order to put a few students through these degree programs that make a difference to economic growth. They help to stimulate economic growth by providing a supply of workers to our economic driven industries and they offer significant opportunities to other people for good, rewarding employment that keeps them as far away from the poverty line as possible.

We have rebuilding that is happening due to storms and we have shortages of folks in the skilled crafts. So, we want to make sure that we're looking at these shifts and understanding that many of the challenges we knew we were going to face in a few years, we're already facing and they are bigger.

One of the things that we have found is that in the area of cyber security and technology is changing quickly. The concern we were having as an industry is, if the education system can change that quickly and adapt to what is going on. It is going to change quickly and it is going to be costly because technology is moving so fast. By the time we get something that we are able to start they are already on to the second generation. As a word of caution, as we go through this process, is we need to keep in mind that we must be flexible both financially and, from a teaching perspective, to adjust to those quick changes.

Transformative redesign in education are the sort of things that make that important. There are some very interesting models around the state that will allow students in bachelor's degree programs to consistently upgrade their skills with short term programs that are very targeted to the current needs of the market. So, they can graduate with a bachelor's degree, but also with a short term certificate in things that aren't directly relevant to the current technologies. They need to consistently upgrade their skills with short term programs that are very targeted to the current needs of the market. They should graduate in possession of a basic understanding of security.

Dr. Reed indicated that she appreciated the idea of iterating on the skill building and the competencies that are going to be so very important and how do we make sure that we're moving where the hockey puck is going all the time.

The legislation does require that we elect a chair and vice chair and, then, set our quarterly meeting schedule. Dr. Reed requested nominations for Chair and Vice-Chair.

Dr. Guice nominated Greg Trahan to be Chair, and Susanna Schowen for Vice-Chair. With there being no other nominations, can we have a motion to approve. Ms. Schowen motioned with a second from Dr. Les Guice. With there being no opposition, congratulations to the Chair and Vice Chair.

The legislation also requires that we meet quarterly and I did want to talk to you about the schedule and the work that needs to be done.

With regards to the actual meetings, legislation states "Special meetings shall be held on call of the chairman or of a quorum of the members of the council. For regular or special meetings, the chairman or other members calling the meeting shall give at least seven days notice to the members of the council of the time and place where the meeting will be held. A majority of the members of the council shall constitute a quorum for the transaction of any and all business.

We can get some groundwork done, get some work done pre-session and would then be ready for session if we need to be able to make the case. This council will need to establish criteria based off the greatest demands and needs and create an RFP. The group can begin gathering the data needed and then come back in the next meeting, January, and actually put down the main criteria for the RFP. Then we could follow up after January to actually agree upon and finalize the RFP and talk about actually releasing it prior to the second quarter meeting in April and figure two to three months. By this time we will have thought through those things and it isn't just an RFP exercise.

Dr. Reed asked if everyone was comfortable with doing some homework, between now and then and coming to a meeting as a working session. Or maybe do some sharing of documents, have conversations, and then have a real working meeting in January with templates and examples of the things we want to go through and talk about. With that in mind, they agreed to think about mid January. A doodle poll will go out and we will send an email with any reading materials, the report from Dr. Guice, and any other materials or things that you think we should be sharing and looking at as a group.

The meeting preferences were discussed, whether they should be virtual and the Chair indicated his preference is going to be whatever everyone else's preference is; what will make them attend and be able to participate in. Dr. Reed indicated that the room they are presently meeting in is always available. Everyone can spread out and it would be beneficial if we could do an in person meeting even if we have to secure a larger room. If it is more reports and presentations, ZOOM is good, but ZOOM isn't really great for conversations and discussion. If that is okay for the group and the Chair, let's aim for a January working meeting, more than an hour, and get it done and then we can go forward from there.

All members were asked to provide their contact information in order to create a good council member distribution list. We need to have an email address that will go directly to you for good distribution of materials, etc.

With there being no further business, the meeting was adjourned.