#### **LaSTEM Advisory Council Minutes**

June 20, 2019, 10:00 AM Cyber Innovation Center Bossier, Louisiana

The LaSTEM Advisory Council met in session at 10:00 am, Thursday, June 20, 2019 on the 2nd Floor Conference Room at the Cyber Innovation Center, 6300 E Texas Street, Bossier City, Louisiana 71111. Dr. Susannah Craig, Associate Commissioner for Teacher and Leadership Initiatives and Interim LaSTEM Program Director, called the meeting to order.

### **Committee Members/Representatives Present**

Susie Schowen, Chair Summer Anderson–Picou (proxy for Tricia Fos) Rick Bateman (proxy for William Wainwright) Ryan Bell (proxy for Mahyar Amouzegar) Rachel Curtis (proxy for John White) Kassie Cusachs (proxy for Patty Glaser) Senator Sharon Hewitt Jeff Holcomb James Madden (proxy for Frank Neubrander)

#### **Committee Members Absent**

# Larry Carter Michael Gaudet Crystal Gordon Stephanie Hilferty Kim Hunter-Reed Carrick Inabnett Jada Lewis Calvin Mackie Stanton McNeely Janet Pope **Kristin Reeves** Scott Stevens Kellie Taylor-White Ken Tucker **Rachel Vincent-Finley** Jaime Williams Laura Younger Tom Yura

## **Staff Members Present**

Susannah Craig Lisa Vosper

## I. Welcome, Roll Call, & Updates

Susie Schowen, Co-Chair, called the meeting to order at 10:00 am. Dr. Craig, Interim LaSTEM Coordinator, conducted roll call and could not establish a quorum due to number of absent committee members.

Senator Hewitt welcomed Advisory Council members, proxies, and guest to the June 20, 2019 LaSTEM Advisory Council and thanked the team at the Cyber Innovation Center (CIC) for hosting us.

Dr. Susannah Craig set the stage for discussion by showing a brief video on Women in STEM and introducing an online article from foreignpolicy.com, "The United States in not Ready for a Cyber-Pearl Harbor."

Dr. Susannah Craig introduced Kevin Nolten and Craig C. Spohn from the CIC.

## II. STEM Showcase: Cyber Innovation Center

Craig C. Spohn, Executive Director and President of the Cyber Innovation Center, and Kevin Nolten, Director of Academic Outreach, provided a presentation on the CIC, National Integrated Cyber Education Research Center (NICERC), and the objectives of the CIC.

Craig Spohn spoke about the center itself. The stakeholders are Lockheed Martin, Ingalls, General Dynamics, Boeing, and Northrop Grumman. Mr. Spohn state that the CIC is located near Barksdale Airforce Base and that Barksdale is responsible for all Air Force nuclear devices, with the exception of submarine. The CIC was built with that in mind. The windows in the facility are espionage window that are sound and bullet proof.

The focus of the CIC and NICE RC is workforce, education, and public outreach. The CIC works to grow cybersecurity in the Northeast Region. A secondary goal is to reach students in early grades and focus on them staying in the state of Louisiana. Mr. Spohn discussed a regional alliance with business and industry, Louisiana Tech, and Bossier Parish Community College.

Kevin Nolten provided information on the NICERC Cyber Interstate Curriculum Model. The Cyber Interstate is a library of free, modular curricula developed by NICERC to empower and equip teachers as they develop the next-generation cyber workforce. Mr. Nolten described the curriculum as an Interstate model with an off ramp at each state and an on ramp to get back on and keep working. This is a regional model for the country. 15,900 K-12 teachers are utilizing this curriculum, approximately 3,200 are Louisiana teachers. The curriculum consists of STEAM Fundamentals, STEM EDA: Explore, Discover, Apply, Cyber Fundamentals, Computational Thinking, Algebra I, Cyber Literacy, Cyber Literacy 2, Cyber Science, Cyber Society, Physics, Advanced Math, Computer Science, and A+ Certification. Dean Don Schillenger from Louisiana Tech provided information that LaTech is offering 4 courses for credit using this curriculum, all online. Mr. Nolten explained that North Dakota is using the NICERC curriculum. A discussion about the use of the NICERC curriculum in Louisiana occurred. Dr. Lisa Vosper commented that this could be a resource for K-12 in the state, a way to grow STEM teachers. Mr. Spohn commented that potential changes in curriculum could be in order, i.e. Math for Computers, a hands-on application of math and sciences. Mr. Nolten commented that this curriculum drives women and minority participation.

Mr. Nolten presented 3 strategies for implementation: Curriculum, Professional Development, and Community Engagement. On July 3rd, NICERC will participate in the CCC Summit. The outcomes of the summit are improved teacher practice and increased community awareness. A discussion occurred about LaSTEM's mission on developing K-12 teachers. Examples provided were Louisiana Tech's UTeach Program and LSU-BR's Geaux Teach Program. In addition, Louisiana Tech's Student Center at Bossier Parish Community College and Teacher with Makerspace were discussed. Currently, NICERC offers 18 total courses. STEAM Fundamentals is a Tier 12-5th grade science curriculum. The Middle Schools curricula includes STEM Applications, Cyber Fundamentals, and Cyber Literacy I and II. At High School, the program offers the Cyber Engineering Jumpstart pathway. Twelve career profile cards were passed around the room.

## III. STEM Events

The discussion on STEM events was postponed to the August Meeting.

# IV. Other Business, Adjourn

Senator Hewitt provided closing remarks on the synergy of the CIC, Business & Industry, and Education. Susie Schowen provided comments on the General Dynamics Information Technology acquisition of CSRA.

Dr. Craig stated that the next LaSTEM Advisory Council meeting will be held on August 23, 2019.

There being no further business to come before the LaSTEM Advisory Council, the meeting was adjourned at 12:00 p.m.