

# stemCONNECT

*A program of the Florida High Tech Corridor*



THE NATIONAL CENTER  
FOR SIMULATION

**MODELING and SIMULATION EDUCATION and NATIONAL  
CERTIFICATION**

***Modeling & Simulation in K-12: Springboard to  
Exciting Careers***

**Hank Okraski, Education & Workforce Development, National  
Center for Simulation**

**Jonah Hardy, M&S Teacher, Hagerty High School**

**2 December 2019**

Medical Simulation Industry

1,200 employees



34

Interactive Digital Media Industry

15,000 employees



# Modeling & Simulation...

Defense Industry

30,000 employees



Theme Park Industry

85,000 employees



Commercial Aviation Industry

2,400 employees



Airbus 320 Simulator



## The Engine of Florida's Workforce



# AVAILABLE ACROSS AMERICA

## CONTROL ADMINISTRATORS

the M&S Certification Program by:

website at [www.SimulationInformation.com](http://www.SimulationInformation.com)

arrantes, Executive Account Manager,

Web/Certification Partners, Inc., 1-800-228-1027, Ext. 4115

Industry Intern Connection by contacting:

O, National Center for Simulation, 407-384-6111

ion & Workforce Development Committee initiatives by

kraski, (SES-Retired), Committee Chairman,

il.com

the Certified Internet Web (CIW) on behalf of NCS,

ored.

educated more than 1 million students and professionals, and

60,000 professional IT certifications throughout thousands

es, universities and learning centers worldwide. For more

, please visit [www.CIWcertified.com](http://www.CIWcertified.com)

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THE NATIONAL CENTER  
FOR SIMULATION

## MODELING & SIMULATION CERTIFICATION

For America's High School &  
Technical School Students



## THE KEY TO YOUR FUTURE

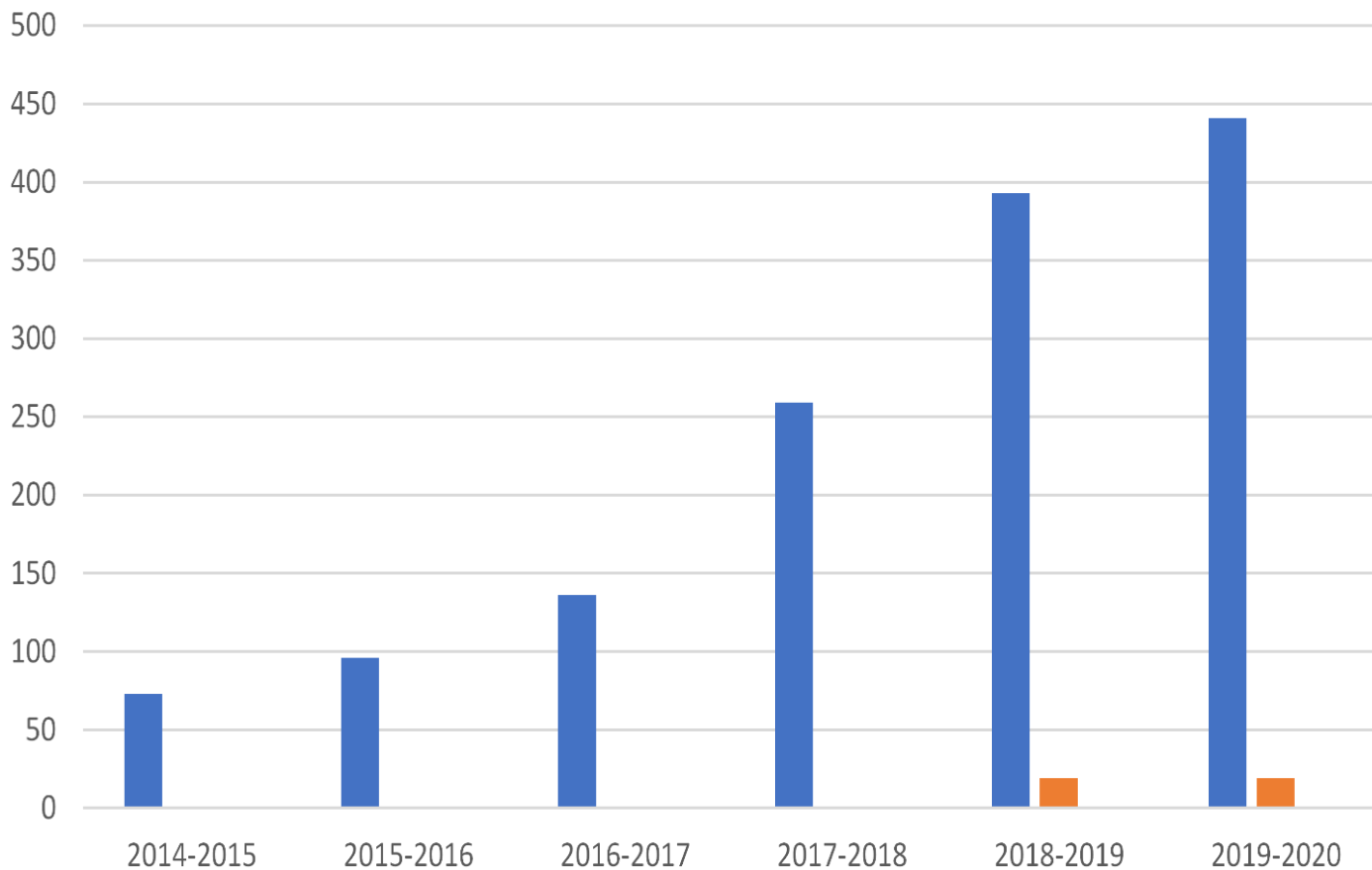
# M&S in K-12 Status

- Hagerty High School (Seminole County) implementing prototype Special Emphasis M&S Program-in great demand by students (and parents).
- Timber Creek HS of Orange County becomes county M&S focus.
- Orange Technical College has successful M&S program underway.
- Seminole State College offering 2 and 4 year computer programming programs with simulation specialization.
- Certifications growing at a rapid rate

# Certified Modeling & Simulation High School Students

## School Year-Cumulative

Data as of 20 Nov 2019



Florida Students  
Virginia Students

## M&S in K-12 Status (Continued)

- Middleton HS scores 100% passing exam.
- Landstown HS, Virginia Beach, first outside of Florida to take examination. Approached states of Ohio, Kansas and Alabama.
- NCS campaign underway to encourage industry to hire M&S Certified Interns. Companies hiring-Cole Eng, Dignitas, Cubic, Simetri and Lockheed Martin.
- *Team Orlando* hosting *M&S Student Day* on 19 February 2020 in Central Florida Research Park. See NCS website. (<https://www.simulationinformation.com/education/ms-student-day/>).
- Working with Hungerford ES and Seminole HS in creating *Aviation Programs*. NAWCTSD providing support.



## **Team Orlando**

# ***Modeling & Simulation Student Day-Preparing Tomorrow's Workforce***

**Wednesday, February 19, 2020**

**9:00 am-2:00pm**



### **Location:**

**Central Florida Research Park  
UCF Partnership Three Building  
Conference Rooms 321A & B  
3039 Technology Parkway  
Orlando, FL 32826**



**Student teams from Florida high schools and technical schools will demonstrate Modeling & Simulation (M&S) projects to the military, academia and technology companies. For more information, visit: <https://www.simulationinformation.com/education/ms-student-day/> and contact your School District Career & Technical Education Office**

# M&S CERTIFICATION REPORT CARD

CERTIFICATION COMPONENT	GRADE	REMARKS
Certification Growth & Expansion	A+	Exponential growth in number of student certifications. Need to expand in other states. (Exceeding expectations)
Study Guide	A	Recently updated with favorable comments from students and teachers. (Good job)
Examination	B+	Requires updating by team of industry, academia and government.(Resource limited)
Internships	C+	Overcoming inertia by industry to hire high school seniors. Some progress being made. (Attitude problem needs work)
Teacher Initial STEM Education & Professional Development	D-	Undergraduate teacher education does not include Modeling & Simulation as a tool for instruction nor are career opportunities covered. Professional Development opportunities limited. (Inertia to change)





# Future Plans

- Continue to encourage members to hire M&S-certified Interns and provide teacher externships. Plan is to distribute student resumes to Board and other local NCS members-to include Team Orlando agencies.
- Continue to move forward with M&S certifications in Virginia, Ohio, Alabama, Kansas and Arizona.
- Examine providing incremental certifications for high school students. (Certification Board tasking).
- Work with NDIA/NTSA in developing a professional M&S continuum.
- Seek funding sources to expand activities.

# **For more information...**

**Visit us in the STEM Pavilion- Booth 3181**

**Or email me at:**

**[Henry.okraski@gmail.com](mailto:Henry.okraski@gmail.com)**