



THE NATIONAL CENTER
FOR SIMULATION

***EDUCATION AND WORKFORCE DEVELOPMENT COMMITTEE
MEETING MINUTES
14 September 2016***

ATTENDEES

Jennifer Borges (OCPS), Col.(USAF) David Cohen (OCPS), Cari Kupec (Brevard Public Schools), Dr. Dennis Duke (FIT), Carol Ann Dykes (UCF), Candace Finley (OCPS), Dr. Demetria Hayes Faison (SCPS), Dr. Cap Jadonath (OCPS), Alan Lynch (OCPS), Daniel Martinez (OCPS), Pete Megara (Hillsborough Public Schools), Danielle Miller (OCPS), Dr. Kristy Murray (Team Orlando), N.Y. Nathiri (PEC), Hank Okraski (NCS), Jackie Rolston-Cary (OCPS), Keith Schechter (Brevard Public Schools), Bob Seltzer (NAWCTSD), Abdul Siddiqui (PEO STRI), Sunny Simmonds (NAWCTSD), Lindsey Spalding (SCPS), Phil Tillery (OCPS), Carol Tingley (OCPS), Lawrence Tirino (OCPS), Jason Touhey (SCPS), Jenna Tuck (Aegis TG), Brad Watson (Hillsborough Public Schools)

Agenda is provided as APPENDIX A

Meeting minutes and presentations will be posted on the NCS website:

www.simulationinformation.com

ACTIVITIES AND DISCUSSIONS:

A. Welcoming

Hank Okraski welcomed the committee members to the meeting held at the UCF Incubator in the Central Florida Research Park. Carol Ann Dykes, Director, welcomed the group to the modern facilities and briefly described the incubator role and occupants. In addition, Carol Ann is the President of the Central Florida STEM Education Council and outlined coming events.

(see website www.centralfloridastem.org)

B. Status of Ed&WD Committee Activities-

Hank Okraski, Committee Chairman, reported on the most recent activities of the committee. They are summarized as follows:

- First on-line high school Modeling & Simulation Certification Exam in Florida was given at Hagerty High School in Seminole County

- In 2017, the M&S Certification Exam will be offered throughout the United States. This year, 2016, the exam is limited to Florida teachers and students. Teachers may take the exam free of charge. Florida students do not have to pay because it is CAPE-funded.
- Certification Board convened (David Scott, Lockheed Martin, Chairman). The Board provides guidance and direction over the conduct of the exam. The Board recognizes that it is a new initiative but would like to see a reasonable number of students pass the exam. Board members expressed the desire to hire students who have been M&S certified.
- Met with Lockheed Martin and OCPS to encourage hiring interns with certification credential. Meeting was very productive. Applicants for summer positions need to apply in the fall of the prior year.
- Participated in Crooms AOIT TechFest X in March 2016. Engineering and Computer Simulations, Inc. was featured in the NCS booth.
- Working with Zora!! STEM planners to include Hungerford Elementary School revitalization. Indications are that the future elementary school will be a STEM school. Hank Okraski is advocating an aviation theme with ties to the Tuskegee University and Airmen. Arranged for a visit by the Hungerford principal and others to the Golfview Elementary School in Brevard County. They have a very exciting program there utilizing an aviation learning platform with heavy student involvement.
- Seven NCS Scholarships were awarded this year, to be expanded in 2017, pending approval of the funding by the Board of Directors
- Participated in OTC Launch Site Expo. The Expo was very impressive with excellent attendance. This was the first such event and is likely to continue on an annual basis. Served on various advisory boards (OCPS & SCPS). Some of the OCPS advisory boards will be consolidated, facilitating attendance.
- Participated in 2016 M&S Hall of Fame (Gen. Sullivan, Bill Waite & Ralph Baer inducted). Refer to www.simulationinformation.com.
- Participated with Lindsey Spalding (SCPS) at Florida Engineering Education Conference (FEEC). Students demonstrated their M&S school projects. Attendees were very impressed with the level of competence and skill in presenting. Feedback was excellent.
- Supported Robotics Programs at various levels.
- Hank Okraski participated in planning for 2016 I/ITSEC (Interviewed for 50th year anniversary, paper in development and presentation will be recorded prior to the conference).
- Committee members are encouraged to continue telling the story of M&S certification (Contacts have been made with Virginia Department of Education, National Modeling & Simulation Coalition, National Science Teachers Association and Team Orlando). Students seeking internship or entry level positions in our industry have a much better chance if they have this certification.

The challenges facing the committee were identified as follows:

- Getting the word out on M&S courses and certification

- Encouraging teachers and students to take the certification exam (In Florida, there is no charge for teachers and for students the state funds the exam through Career and Professional Education (CAPE) funding).
- Getting Florida M&S Courses on the Florida Department of Education on the Post-Secondary List of Courses
- Finding and developing teachers with skill-sets to teach STEM/ M&S.
- Introducing STEM/M&S in university teacher undergraduate programs
- Producing incentives for teachers to stay in K-12 Education
- Encouraging industry to hire interns, co-ops and part-time teacher employment

C. I/ITSEC Activities

Kristy Murray, substituting for “Roto” Reuter, indicated that this year the number of students permitted to attend I/ITSEC will be allocated to the schools that have attended in the past or have expressed an interest in attending. The number allocated to each school is 20.

D. Seminole County M&S Implementation Status

Lindsey Spalding, Lead M&S Teacher at Hagerty High School, reported on progress in implementing the new Modeling & Simulation curriculum. (Attachment B).She reported that a second teacher, Michael Cabrera, has been hired to assist in teaching M&S courses. NAWCTSD has volunteered to provide guest speakers and other assistance in conducting the courses. She requested support to outfit 5 VR stations for her classroom laboratory. The cost of each station is \$2,400.00.

E. Orange County Public Schools STEM Overview

Dr. Jadonath and Carol Tingley brought us up to date on OCPS STEM/M&S education initiatives and the need to put emphasis on STEM in K-12. OCPS will be working to establish M&S programs at Timber Creek, Winter Park and University High Schools. The Mid Florida Campus of Orlando Technical College has a growing program with expectations of several students taking the M&S Certification Examination.

F. OTC Mid Florida Campus M&S Program

Alan Lynch (OTC) briefed the group on the progress at his campus. Considerable progress is being made with student enrollment and interest in the capabilities at the school. Alan Lynch has instituted a guest lecturer program very well accepted by the students.

G. ZORA!STEM Activities

Dr. N.Y. Nathiri, P.E.C., introduced Ms. Candace Finley, OCPS teacher, who gave demonstrations of science projects she employs at the elementary and middle school levels.

H. New Business

There was a generous amount of discussion concerning the implementation of the M&S curriculum at Hagerty HS. Representatives from Orange, Hillsborough and Brevard Public School Systems had many excellent questions, replied to expertly by Lindsey Spalding, lead teacher at Haggerty HS. It became obvious that there is a need for a workshop for teachers currently teaching courses in gaming, animation and simulation. We are targeting the summer of 2017 to hold such an event in Orlando. More information to follow.



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APPENDIX A

**EDUCATION AND WORKFORCE DEVELOPMENT COMMITTEE
MEETING**

**Wednesday, 14 September 2016
3-5 PM**

**Location: UCF Incubator, 3259 Progress Drive, NORTH Entrance
Room 127 A&B, Central Florida Research Park, Orlando, FL 32826**

AGENDA

TOPIC	FACILITATOR
Welcome & Introductions (5)	Hank Okraski (NCS Board)
Welcome to the UCF Incubator (5)	Carol Ann Dykes (UCF)
Central Florida STEM Education Council (15)	Carol Ann Dykes (CFSEC))
NCS Ed & WD Committee Activities (10)	Hank Okraski
I/ITSEC Teacher & Student Activities (10)	Bill “Roto” Reuter (R- Squared) Bob Seltzer (NAWCTSD)
Seminole County STEM/M&S Overview(15)	Paul Wahnish (SCPS)
Hagerty High School M&S Program (15)	Lindsey Spalding (SCPS)

Orange County STEM Overview& M&S Strategy (15)	Dr. Cap Jadonath (OCPS) Carol Tingley (OCPS)
OTC Mid-Florida Campus M&S Program (15)	Alan Lynch, OCPS
ZORA! STEM Activities (10) (Hungerford HS Revitalization)	Dr. N.Y. Nathiri (P.E.C.)
New Business & Announcements (5)	Hank Okraski & All



THE NATIONAL CENTER
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**EDUCATION AND WORKFORCE DEVELOPMENT COMMITTEE
MEETING**

Wednesday, 10 February 2016, 3-5 PM

Orange Technical College, Mid Florida Campus, (Launch Site-Building 1600),
2900 W Oak Ridge Rd., Orlando, FL 32809

AGENDA

<u>TOPIC</u>	<u>FACILITATOR</u>
Welcome & Introductions (5) Welcome to the M&S Launch Site (5)	Hank Okraski (NCS Board) Dr. Cap Jadonath (OCPS)
Committee Activities(10)	Hank Okraski
Seminole County M&S Implementation (15)	Lindsey Spalding (SCPS)
TechPath/ STEM Connect (10)	Dr. Jeff Bindell (UCF/FHTCC)
Rollins College- Veterans MBA Program (15)	Joshua Snyder (Rollins) Michael Kazazis (Rollins)
Central Florida Scouting & Opportunities (15)	Brandon Gawel (District Ex.,B)
ZORA! STEM Activities (10)	Dr. N.Y. Nathiri (P.E.C.)
Old Business (I/ITSEC Feedback) (10)	All
New Business & Announcements (10) STEMulation EXPO at Launch Site Central Florida STEM Council	Hank Okraski & All Dr. Cap Jadonath CarolAnn Dykes (UCF)
Tour of OTC Launch Site (30)	Alan Lynch (OCPS)
Adjourn	

