## **Iowa Governor's STEM Advisory Council Meeting XIV**

Sheraton West Des Moines Hotel | 1800 50th Street | West Des Moines

June 30, 2016 (Thursday) | 10:00AM to 3:00PM



BALLROOM, Sheraton West Des Moines	
10:00AM	Welcome from Co-Chairs
	The Honorable Kim Reynolds, Lieutenant Governor of the State of Iowa, and Dr. Chris Nelson, President and CEO of Kemin Industries  Co-Chairs, Governor's STEM Advisory Council
10:10 to 11:10AM	<ul> <li>Working Group Reports, Discussion</li> <li>STEM Equity – Matt McDonald, Principal Financial, Molly Faber and Paul Gibbins</li> <li>Computer Science for Iowa – Mark Gruwell and Ann Watts</li> <li>Active Learning Community – Deb Frazee</li> </ul>
	Transition STEM Career video: DuPont Pioneer
11:10 to 11:15AM	Coffee refill break
11:15AM to 12:10PM	<ul> <li>STEM Council – for your information:</li> <li>New evaluation component: "Where are they now?"</li> <li>Dr. Liz Hollingworth and Dr. Katie Winn, UI Ctr. for Evaluation and Assessment</li> </ul>
	Messaging 2015-16, Strategic America     Courtney Shaw, APR, Senior Public Relations Account Manager, Strategic America
	• Secondary Career and Technical Education (CTE) Legislation and National Governors Association Work-based Learning Policy Academy Grant Dr. Pradeep Kotamraju, State CTE Director, Iowa Department of Education
	• Regents Alternative Pathway to Iowa Licensure Program Susan Fischer, Coordinator (Video: Angel Mendez)
	Transition STEM Career video: Wells Blue Bunny
12:10 to 12:45PM	<ul> <li>Lunch Program (boxed lunch options)</li> <li>Co-chairs recognize six Hub Institutions for exemplary service:         <ul> <li>Southeast Hub: Barry Butler, Executive Vice President and Provost, University of Iowa, and Bill Lamb, Vice President for Academic Affairs, Kirkwood Community College</li> <li>South Central Hub: "Marty" Martin, President, Drake University</li> <li>Southwest Hub: Tom Lesan, Vice President of Economic Development, Southwestern Community College</li> <li>Northwest Hub: Val Newhouse, President, Iowa Lakes Community College</li> <li>North Central Hub: Jonathan Wickert, Senior Vice President and Provost, and Cathann Kress, Vice President for Extension and Outreach, Iowa State University</li> <li>Northeast Hub: Jim Wohlpart, Interim President, University of Northern Iowa</li> </ul> </li> </ul>

	Transition STEM Career video: Acieta
12:45 to	STEM Showcase
1:15PM	Roosevelt Externship results in Roughrider Rootbeer Company! Ehren Whigham and student(s)
1:15 to	Working Group Reports, Discussion (con't)
1:45PM	Global STEM Education – Isa Zimmerman
	Ag Science for STEM – Rachel Hurley
	<ul> <li>Engaging Counselors in STEM – Rob Denson</li> </ul>
	• A new working group: The Youth Voice – Kwizera Imani
1:45 to 1:55PM	Transition STEM Career video: Accumold
	Refill break
1:55 to 2:45PM	Break-out Discussions: Getting Granular: Future Directioning for Iowa STEM [Based on December's SWOT discussion highlighting "expand community engagement," "engage business," "connect students with world of work," "avoid mission drift," "build sustainability," "systemic teacher training," "diversify talent pool," "integrate with permanent organizations and
	structures," "increased awareness" and "measure, measure, measure."]
	Education Sector – facilitated by Jeff Weld
	<ul> <li>How can we "institutionalize" or enculturate STEM in schools?</li> </ul>
	<ul> <li>Who and what are the organizations and structures in place to help?</li> </ul>
	<ul> <li>What would integrated and comprehensive STEM professional development look like?</li> <li>How can STEM be elevated to priority status among school leaders?</li> </ul>
	Business Sector – facilitated by Carrie Rankin
	<ul> <li>Interest in starting a Fund Development Committee? (Function to be identified)</li> </ul>
	<ul> <li>How to engage more business partners in helping with STEM programs across Iowa?</li> <li>How can we grow workplace opportunities for students?</li> </ul>
	<ul> <li>How might our STEM Council equip you (e.g., communication tools, calendar, etc.) to advocate for STEM with legislators regarding STEM skills and future workforce?</li> </ul>
	Nonprofit/Policy Sector – facilitated by (TBD)
	<ul> <li>What works in uniting communities around a cause that we could do with STEM?</li> <li>How can we keep STEM "fresh" and innovative in the coming years while maintaining successful programs on fixed finances?</li> </ul>
	<ul> <li>How can we assure that our STEM work integrates into communities for sustainability?</li> <li>What else ought we be measuring to determine effect?</li> </ul>
2:45PM	Closing Remarks from Co-Chairs
	The Honorable Kim Reynolds, Lieutenant Governor of the State of Iowa, and Dr. Chris Nelson, President and CEO of Kemin Industries Co-Chairs, Governor's STEM Advisory Council

NEXT MEETING: September 28, 2016 (Site TBD)

## **Programs of Iowa's STEM Council Spring 2016**



**Regional STEM Network:** Six regions, each operated by a regional STEM manager housed at a hub institution and each guided by a Regional STEM Advisory Board. School-business partnerships, regional communications, events and local implementations of Council programs.

- 1. **STEM Scale-Up Program**. Exemplary S-T-E-M programs in engineering, computers, energy, mathematics, basic science and more, provided to ~2,500 PreK-12 educators and ~100,000 children throughout the state.
- 2. **STEM BEST (Businesses Engaging Students and Teachers).** A total of 8 (so far) community collaborations involving school and business partnerships.
- 3. **STEM RLE (Redesigned Learning Environments).** A total of 13 re-designed 21<sup>st</sup> century learning spaces along with the preparation of educators capable of conducting student-centered, active, problem- solving instruction, making purposeful connections to local business partners.
- 4. **Iowa STEM Teacher Externships.** Six-week workplace immersions in summer professional development in local industries and businesses for STEM teachers in Iowa.
- 5. **STEM Festivals.** Engaging, free, hands-on educational experiences (45 last year across lowa) for preK-12 youth and their families.
- 6. **I.O.W.A. STEM Teacher Award.** Kemin Industries sponsored award to honor certified K-12 teachers in lowa who teach a science, technology, engineering and/or mathematics subject and who are inspiring lowa's students to develop a passion for STEM subjects.
- 7. **Code Iowa**. Partnership with Code.org on the "Hour of Code" during national Computer Science Education Week. Some 800 Iowa schools have participated in an Hour of Code.
- 8. **Microsoft Imagine Academy**. A software and systems certification program that bridges the world of education with the world of work.150 lowa schools are involved, thousands of kids have earned certifications.
- 9. **STEM Seal of Approval.** Fourteen (so far) outstanding non-Council programs affiliated through common goals, high quality.
- 10. **STEM Teaching Endorsement.** Four universities (so far) with one more in development and at least 10 more working on it, producing STEM teachers.
- 11. STEM @ State Fair. Annually engages about 10,000 lowans via dozens of exhibits, stage acts, vendor partners.
- 12. **STEM** @ **State Capitol.** Annually engages legislators via dozens of exhibit partners and corporate-sponsored lunch.
- 13. Annual State STEM Summit. Four-to-five hundred attendees learn from and contribute to Iowa STEM.
- 14. **STEM Schools + Business Innovation conference.** A uniquely lowarbrand of partnerships that support local schools to develop workplace-based learning experiences with local employers.
- 15. **STEM Messaging Campaign.** With Strategic America, staff training in communications, print, radio, video and television creations, event promotions, branding and more.
- 16. OTHER RESOURCES PRODUCED BY STEM COUNCIL
  - a. Business Engagement Toolkit. Programs and guidelines that engage business and education in STEM.
  - **b. STEM Program Evaluation & Report.** Conducted by a consortium of evaluation centers at the University of Northern Iowa, the University of Iowa and Iowa State University.
  - **c. STEM On-line**: Website daily maintained and updated array of resources, data and information. Twitter, Instagram, Facebook communication platforms updated routinely, frequently.
  - d. STEM Video Library. A growing array of public awareness videos on YouTube at <a href="https://www.youtube.com/user/iastem">https://www.youtube.com/user/iastem</a>.
- 17. **Active Working Groups:** Focused on Council priorities Computer Science, Ag. Science, Counselors, Volunteering, Arts, Informal/Nonformal, 4-year and Community College connections, youth voice and others convened as needed (e.g., proposal or award reviewers, website design, broadband, event planning, etc.).
- 18. **Grants.** STEM co-leads a Natl. Gov.'s Assoc. Work-based Learning Policy Academy with the IA. Dept. of Ed. STEM has two grants in operation from the National Science Foundation for evaluation (\$1.2M) and for Externships (\$1.3M). More to come!