

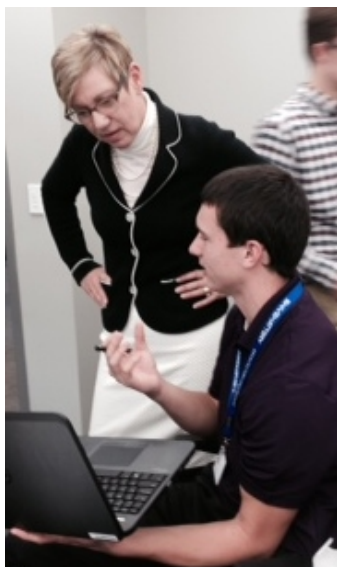
South Central STEM Hub Newsletter

GREATNESS
STEMS
FROM IOWANS

Drake
UNIVERSITY

SOUTH CENTRAL IOWA REGION GOVERNOR'S STEM ADVISORY COUNCIL

STEM Happens



Whenever possible, board members visit various STEM programs. (Top) Mary Bontrager and Kim Wayne learn what Waukee CAPS students do at Shive-Hattery. (Bottom) Mary Madison, Amber Pargmann, Kari Hensen, and Becky Wigeland tour the Maker Space at the Science Center of Iowa.

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GREATNESS
STEMS
FROM IOWANS

Counting Down the Days:
**BEST/RLE
Proposals due
September 1**



SC STEM Advisory Board News

This year, the Hub welcomes three new board members. To help you get to know those who serve on the board, we'll continue featuring individuals in monthly newsletters.

- John Arbuckle, Vice President of Crop Genetics Research and Development at DuPont Pioneer;
- Amber Pargmann, Ottumwa John Deere Engineer and INSPIRE Coordinator; and
- Robert Volp, Business Systems Consultant at Wells Fargo and Boy Scouts of America leader.

Congratulations to Katherine Harrington, newly elected 2015-16 board president. Read more about Harrington in our [June newsletter](#). Thank you to Karen Pattison, who served as the 2014-15 president and did a phenomenal job. The president is elected by the regional board.

Both the Businesses Engaging Students and Teachers (BEST) and STEM Redesigned Learning Environment (RLE) models share the goal of uniting the expertise of public and private sectors to strengthen the continuum from school to careers. Awarded applicants will receive \$25,000 to be matched with local cost-share and will be designated as innovative partners of the Governor's STEM Advisory Council modeling excellence.

Learn more! Click [here](#) to access the [proposal and more](#). You can also view this [informational webinar](#).



Governor Terry Brandstad, Board Member Karen Pattison and Lt. Governor Kim Reynolds at STEM Day at the Capitol.

South Central Board Members

2015-16

- John Arbuckle
- Mary Bontrager
- John Chai
- Dr. Jack Gittinger
- Katherine Harrington
- Dr. Kari Hensen
- Mary Madison
- Amber Pargmann
- Karen Pattison
- Rosemary Peck
- Dr. Steven Sieck

Want to get involved? The South Central STEM Hub is governed by a community-driven, non-partisan advisory board, comprised of educators, business and industry, non-profit interests and parents/community volunteers. It's a three year commitment and new applicants are considered as vacancies occur. We're always seeking those passionate about STEM to help with this endeavor. If you're interested in becoming part of this board, please click [HERE](#).

Employing STEM

Robert Half Technologies Employing the T in STEM

Stacey Singleton knows the technology workplace market. With degrees from ISU and Drake, she works as the regional vice president with Robert Half Technologies and serves on the SC STEM Hub's Advisory Board. Her job is to help businesses find technology professionals that best fit their needs.

We asked her a few questions about the technology job market.

Q. What are the most sought-after degrees at Robert Half?

A. Within the tech sector, the most sought-after degree we see is a bachelor's degree in computer science. Within the creative industry, employers are looking for graduates with a bachelor's degree in marketing, advertising, creative design, multimedia, graphic design or communications, depending on their



"I spend my days working closely with my teams to ensure we find the best possible match between our candidates searching for jobs and our clients searching for top talent," says Singleton.

- Stacey Singleton
- Robert Volp
- Kimberly Wayne
- Becky Wigeland

Rotating Off - Thanks for your service!

- Joan Corbin
- Tej Dhawan
- Dr. Rodney Henshaw

What can the Hub do for you?

The Hub is dedicated to sharing resources, creating contacts and assisting any educator with STEM needs. We can...

- * Provide hands-on materials and professional development at no cost. Applications will be available in January 2015.



- * Connect you with community mentors

Dr. Sarah Derry, SC STEM Hub Manager

- * Update you with newsletters, social media and calendar events

- * Promote your current programs

- * Connect you with Drake University STEM and education programs and advisers

specialty.

- Certifications are also hugely important within the tech and creative fields. These change frequently, but currently we're seeing a lot of demand for professionals with the following tech certifications: A+, Network+, Security+ and CCNA. These also vary by specialty - for example, program managers often require a PMP certification.
- Employers look for creative professionals who are certified in Google Analytics or Google AdWords.

Q. What can your company do for high school age students and beyond?

A. Robert Half is a specialized staffing firm, so we mainly provide opportunities for entry level and seasoned professionals. We do offer both temporary and permanent placement services.

Q. When looking at the technology sector for employment, what courses should a student take in high school?

A. Be open to taking IT/ coding courses if your school offers them. If not, try to get involved in extracurricular community organizations that allow you to learn and grow in the IT field, and give you a sense of what areas you may want to pursue within it.

TIP: Students or recent graduates should treat their internship or volunteer experience like a real job on their resume: List it near the top – just be sure to point out that it was an internship or volunteer work.

Q. What would you tell those who are just about to graduate from a university or college?

A. Find an internship. Check with your alma mater or a local university about post-graduate internship programs. Some employment sites also list these opportunities. Contact potential employers directly to find out if they offer paid or unpaid internships.

Explore volunteering. Nonprofit organizations, like any business, rely on technology to operate, but don't always have the resources to hire full-time tech talent. Offering your IT expertise on a pro bono basis helps you earn real-world experience while doing work that benefits others.

Q. What character traits or people skills do you look for in potential employees?

* Loan STEM-related kits, books and materials to educators

EMAIL: scstemhub@drake.edu

WEBSITE: <https://scstemhub.drake.edu/>

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DMACC-Ankeny STEM Festival



DMACC Ankeny
STEM FESTIVAL
Science • Technology • Engineering • Math
MONDAY, OCTOBER 19, 6pm-8pm
DMACC ANKENY CAMPUS, FFA ENRICHMENT CENTER
Register at scstemhub.drake.edu
FUN, FAMILY-FRIENDLY, FREE
event for 3rd-8th graders and families.
An evening of interactive STEM activities designed for students to **EXPLORE, CREATE, MAKE,** and **LEARN** about exciting opportunities in Science, Technology, Engineering and Math.
Questions? Contact Amy Steenhoek at DMACC 2006 S. Ankeny Blvd. absteehoek@dmacc.edu or 515-965-7117
  
This is not a school district publication. It is being distributed through the school district as a community service of the District to inform you of other community activities or services available. The STEM Festival is an initiative of the Governor's STEM Advisory Council.

WHEN: Oct. 19

WHERE: FFA Enrichment Center
Ankeny-DMACC Campus
1055 SW Prairie Trail Pkwy
Ankeny, IA 50023

A. Nontechnical skills are very important - here are four areas to focus on:

- **Communication.** It may seem a given that you need to speak and write clearly, but some IT pros fail in this area. Avoid using jargon or technical concepts that are obvious to you but might be unclear or unfamiliar to others.
- **Conflict resolution.** Disagreements occur in every office. Learning how to calmly sort out issues and find acceptable compromises will aid you throughout your career.
- **Teamwork.** Is another student working on a major project, or do they need help studying for an upcoming test? Offer to help out if you're not overloaded yourself. The way to win support is by giving support when it's needed.
- **Diplomacy.** Always maintain a professional tone when communicating with others. This means never corresponding when you're angry or frustrated -- you could regret it later.

TIP: When job-hunting, recent grads should consider positions that might be less than ideal in terms of duties or pay to get a foot in the door with their desired employer. Once you have a position, you can work your way up.

Q. Many young people are looking for a way to create a brighter future. What does Robert Half do to make the world a better place?

A. Robert Half is heavily involved in community outreach and volunteer projects, as well as environmental initiatives, including Boys and Girls Clubs of America, Dress for Success, Enactus, Breast Cancer Support, Hope on the Slopes, Upwardly Global, and Starlight Children's Foundation.

Robert Half Technologies contributes both volunteer and financial resources to Iowa's STEM Initiative. If you'd like more information on the company, please click [HERE](#).

Also, does your company put the S, the E or the M in STEM? If so we'd love to interview you! Contact lisa.morlock@drake.edu.

STEM Active Learning

WHEN: 6-8 PM

Click to register as a [PARTICIPANT](#) or an [EXHIBITOR](#) or [VOLUNTEER](#).

Print this flyer for your school:
[2015 Anekny-DMACC STEM Fest Flyer](#)

FREE * FUN * OPEN TO ALL

Correction

In the last newsletter, we mistakenly associated the Clarke County Fair and Noah Heckman with Oskaloosa. Both reside in Osceola.

We'll LEND it to YOU!



The SC STEM Hub has a lending library that's available to regional educators. Items include:

* 30 Samsung Galaxy 7.0 Tablets (pictured above)

* Hands-on Kits

* EiE Notebooks

STEM Active Learning Toolbox



Professional Development Series September 9 and 11, 2015

Take advantage of these **STEM Active Learning Professional Development Workshops**, featuring active, hands-on, learning that embraces 21st Century Learning

Skills (Collaboration, Critical Thinking, Communication, Creativity and Problem Solving).

The STEM Active Learning Community Partners Group will feature a series of breakout rotations in which participants will have a chance to **transform a STEM lesson** with the Harvard-based "Dimensions of Success" Program Planning Tool and Click2Science professional development resources.

At the end of the workshop, participants will have a **high-quality STEM activity to use at their own program or organization**, an understanding of the DoS Planning Guide, a tool for planning high quality STEM activities, and a free, online resource that aligns with the planning guide and provides research-based professional development modules for **building staff confidence in facilitating STEM!**

There are two workshop locations to choose from. See more information, below.

What:

STEM Active Learning Professional Development

For:

Individuals who facilitate STEM in active learning (out-of-school time/informal/STEM-rich institution) settings

When and Where:

Wednesday, September 9, 2015

Montgomery County Fairgrounds, White Exhibit Building
4th Street, South of Highway 34
Red Oak, Iowa 51566

* Family Science Projects and Stories

For a full list of materials, click [HERE!](#)

Looking for more STEM news?

Like us on Facebook 

Follow us on 

[Check out our calendar!](#)

Find us at:

SC STEM Hub
Drake University School of Education
3206 University Avenue
Des Moines, IA 50311

Call us at:

515-271-2403

Dr. Sarah Derry, Manager

Remember to **send us** your STEM events and news, too! We can help you promote your event.

Email: scstemhub@drake.edu



OR

Friday, September 11, 2015

Grand View Student Center

Speed Lyceum

East 14th Street and Grandview Avenue

Des Moines, Iowa 50316

Register on the Iowa Children's Museum website, [here](#).

STEM in the Classroom

Regional Externs Bring Experiences Back to the Classroom

Think a teacher externship isn't for you? Think again! STEM Externs are valued, paid and can take vacation. Here's what South Central-area teachers had to say about their summer experiences. Click [HERE](#) to learn how you can get involved next summer.

“ In my classes, we talk quite a bit about what 'real' science is like, as well as how scientists work, solve problems, etc. My experience [at Kemin] will help me teach these concepts.” –Kayla Bauer

“ I think the biggest takeaway from this challenge [at John Deere] is to emphasize the need for adaptability to my students. Just



because you are proficient at one process does not mean that you can stop learning. In order to be truly successful in this life, learning can never stop."
--Dane Dickenson, pictured at left

“ I didn't realize how important algebraic thinking is for computer programming. And

that oh so popular logical thinking is needed for Geometry proofs. Yes, it really is used in the real-world [at the Southern Electric Cooperative]!"
--Natalie Piper

“ I was able to find countless connections to the Iowa Core Math Standards during my time at MidAmerican." --Andi Thomas (Weger)

“ Many times, students do not understand the importance of their character. It is very important to be a trustworthy person. That goes hand in hand with the 21st Century Skills, whether it is showing up on time or being accountable with your time [at Musco Lighting]." --Taaf Vermeulen

“ My experience this summer will give me a great real-life example to share with students of the random sampling method and the mathematics involved in extrapolating data [for the City of Des Moines]." --Taylor Hubbard

“ I want to help my middle schoolers understand the importance of staying organized and having a plan before beginning a task." --Olivia Palmer

>Top Photo: Olivia Palmer, Dr. Sarah Derry and Taylor Hubbard discuss their work with the Emerald Ash Borer. >Bottom Photo: City of Des Moines Arborist David Jahn coordinated the externship. >Read more about their internships in our [July newsletter](#).



Events

Add these dates to your calendar!

September 1 -- Iowa STEM BEST/RLE Proposals Due

September 15 -- EiE, Drake University

September 24 -- EiE, Drake University

October 19 -- DMACC-Ankeny STEM Festival

November 8 -- Brooklyn, IA STEM Festival

February 23 -- IHCC-Ottumwa STEM Festival

April 14 -- Drake-Des Moines STEM Festival

Spread the word about STEM EVENTS in your community!

Visit the [South Central STEM Calendar](#) to get details on these events and see LOTS more!

[To submit your STEM event, click here!](#)

[Forward this email](#)



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