ISTS NEWS

Iowa Academy of Science | Nadine Weirather, editor | News in Science Education

We're Back!!

After several years of an online, blog-like newsletter, the pdf format is back! Fewer and fewer people were accessing the online version, so it was decided to try a better way to get the news to you. -NW

Spring Conference

The theme is Science Teaching and Collaborating in Unprecedented Times. We are excited to be able to come together to share strategies and successes, tips for virtual or in-person teaching, collaborating, surviving, and thriving in the midst of a pandemic. More importantly, we hope this conference will be an opportunity to support one another and reenergize.

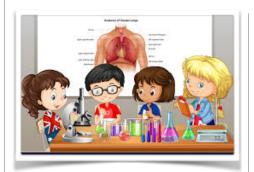
We hope eliminating costs, the virtual format, and amended meeting times will allow us to best serve as many lowa science teachers as possible in these trying times. Please share with your colleagues from around the state.



To ISTS-IAS Membership,

We have some exciting news on the horizon! On March 6th, we will have the Spring 2021 Virtual ISTS conference. Typically, our conferences are in the fall, but due to the coronavirus, it was postponed to the spring. We are in the process of putting together the schedule and we've noticed we have a great mix of topics and grade levels for our sessions. We hope to return to a face-to-face conference as soon as we are able, but the virtual conference will still be filled with meaningful sessions and time to interact with your colleagues from across the state. The conference is completely free this year, so we encourage you to reach out to your colleagues and encourage them to attend.





Simulations for All

PhET has added/updated several simulations for many subjects and many grade levels. If you haven't checked out their offerings in a while, it's time to go back and see the improvements. These are great for Virtual Learning.

- Circuit Construction Kit: DC
- Number Line Operations
- Diffusion
- Energy Skate Park
- Gases Intro
- Vector Addition
- Waves Intro
- Build a Molecule
- Natural Selection

PBS Learning

<u>Crash Course</u> (listed for grades 9-12+)

From balancing chemical reactions to biology and artificial intelligence, never before has one collection offered such an aweinspiring range of content! *Crash Course* offers it all in quick-paced, imaginative videos.

We will also be launching the election for Vice-Chair (who becomes Chair the following year) very soon. We have two amazing candidates with Katie Borton from Nevada High School and Alicia Schiller from Central Lee High School. Results of the election will be announced in mid-March. Don't forget to vote!

I would like to extend my gratitude to the ISTS-IAS board for their efforts to help us transition the conference online. Specifically, I would like to thank:

- * Craig Johnson- ISTS Executive Director
- * Jaci Easter- ISTS Chair
- * Traci Maxted- ISTS Conference Program Coordinator
- * DeEtta Andersen- ISTS Secretary
- * Tom Ervin- ISTS Awards Coordinator/Photographer
- * Mauree Haage- ISTS Treasurer
- * Barb Jacobsen- ISTS Exhibitor Coordinator
- * Cory Davis- ISTS Office Manager

Finally, I would like to thank all of the members and exhibitors that make ISTS possible. This organization has meant a great deal to so many of us that are interested in promoting effective science education across the state. We value your time and your contributions to science education-- particularly during this global pandemic.

We hope to see you at the Spring 2021 conference on March 6th!

Sincerely, Jesse Wilcox, Ph.D. ISTS Conference Chair

ISTS Conference

Teaching and Collaborating in Unprecedented Times

Virtual Conference: FREE!

Saturday, March 6, 2021

8:00-4:15

Program

Register today!



Science News February 25, 2021



What do worms, an old corn knife, and a pizza have in common? They are all part of the professional development offerings for this spring! If you need license renewal credit or graduate level credit, this spring you now have three options.

- The Biology of Soil
- Farming Then & Now
- Farm to Pizza

The Iowa Ag Literacy Foundation posted three statewide contest projects they have coming up: <u>High Steaks</u>, <u>Pizza-thon</u> and <u>A Bushel of Stories</u>. There are opportunities for students ranging from kindergarten to 12th grade!



Project WILD is a hands-on professional development workshop that emphasizes awareness, appreciation, and understanding of wildlife and natural resources. The workshop is designed to meet the needs of K-12 educators in both formal and non-formal settings.

Participants receive two award winning guides filled with over 100 lesson plans that include STEM extensions, career connections, and more! [The materials have undergone a major revision with a focus on field investigations that align very well with NGSS.]

Registration LINK: https://forms.gle/

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Date: Monday, March 23, 2020

Time: 9:00 am - 2:30 pm

Location: Nahant Marsh, Davenport: https://

nahantmarsh.org/

Cost: \$55

Lunch - bring your own (on site)



Check out the activities for teachers and students at Blank Park Zoo.



Sign up today for the April 1 <u>UnConference by Science Is Cool</u> <u>and PocketLab</u>. "We continue to work with STEM industry leaders,

coordinators, celebrities, school districts, teachers, and trailblazers from all walks of life to build the coolest, most integrated STEM experiences imaginable to bring the STEM community together to build a brighter and bolder future."

• YouTube Channel - See past UnConferences



GOVERNOR'S STEM ADVISORY COUNCIL

STEM Scale-Up Grant Applications due

March 5. Have you applied yet? Don't miss out! The Iowa Governor's STEM Advisory Council selects some of the state's and nation's high-quality programs and offers professional development/ training and materials to Iowa educators through the STEM Scale-Up Program.



The Science Center of Iowa has great offerings for teachers and students.
2021 is shaping up as another year of "Big Science" with extreme winter

weather, vaccines and the Perseverance rover landing on Mars. You'll find lesson plans, virtual learning, news, and outreach opportunities.



The <u>National Inventors</u>
Hall of Fame inspires

emerging creators and entrepreneurs through education programs and honors the history of innovation through their museum and Hall of Fame Inductees. Science News February 25, 2021

<u>Midwest Environmental Conference</u> is in lowa this year! Save the date!! July 26-29, 2021 ~ Luther College in Decorah. The theme is **Exploring Community: Land, Water, People.** The sessions will focus on the ideas of re-defining community to include all land, water, and people, and building healthy, resilient, vibrant communities for all. The committee is excited to announce that Robin Wall Kimmerer will be the keynote.

Planning for Effective Science from the Council of State Science Supervisors The Council of State Science Supervisor's Leadership and Policy Committee has developed a collection of five "two-pagers" outlining some back-to-school considerations for science teachers and those who support them. Each PDF consists of an overview, reflection questions, a vignette for discussion, as well as other resources. You can download all five HERE. (Found on Iowa Department of Education website (posted by Eric Hall)

AEOP (<u>Army Educational Outreach Program</u>) offers science, technology, engineering and math (STEM) programs for all ages, and at varying levels of experience and interest. Check out our programs below and **take note of the fast-approaching application and registration deadlines**. All programs are free and within commuting distance!

lowa Leaders Star in STEM Essential Podcast: *Vaccination, by STEM!* The STEM Council launched the third series of its podcast, STEM Essential. The theme of this series, sponsored by Accumold, is "Vaccination, by STEM!" and features lowans on the front lines behind developing, distributing and administering COVID-19 vaccines. You can find it and past podcasts at **The STEM Essential Podcasts** site. These are excellent podcasts, led by Jeff Weld, that highlight STEM in lowa.

Iowa STEM BEST Program opens March 8. The Iowa Governor's STEM Advisory Council has awarded 75 STEM BEST® Programs since 2014 with an opportunity to grow a series of community collaborations involving school+business partnerships. Working side-by-side, teachers and industry professionals will craft curriculum and projects that prepare students for exciting career pathways in the STEM fields of manufacturing, information technology, bioscience (agriculture and medicine), finance, and more.

BSCS Science Learning and AAAS Project 2061 are recruiting elementary, middle, and high school science teachers who are able to field test assessments with their students in **April/May**. The assessment tasks of this study are being designed to Assess Students' Progress on the Energy Concept Using Three-Dimensional Items (ASPECt-3D). Please register before March 26, 2021. As a thank-you, each participating teacher will receive a \$25 gift certificate to amazon.com. Find out more **HERE**.

American Museum of Natural History: Advance your career and earn graduate credit with online **courses** in the life, Earth and physical sciences. Gain access to Museum research, resources, and much more. Six-week online courses provide access to cutting-edge research, world-class scientists, and powerful classroom resources and are designed around your busy schedule with 6 sessions offered per year.

The Iowa Science Teachers' Section of the Iowa Academy of Science advocates for excellence in science education by promoting professionalism, influencing policy, and enhancing learning.