



**Kansas Corn's
Teacher-Led STEM-Based
Education Program**

*Offering curriculum, materials
and training opportunities
for K-12 Kansas Educators*

*Welcome to our quarterly newsletter! See
what we have to offer to Kansas educators!*

This is a newsletter written **by** teachers **for** teachers to keep up on what's happening with Kansas Corn's STEM-based education program! We've got curriculum, materials and training for K-12 teachers interested in incorporating inquiry techniques, and using corn to help students see how technology fits into their lives and their future!

Visit kscorn.com for CORNTASTIC education resources!

***High School and Middle School Science Teachers
Seed to STEM Applications Due April 1st***

The deadline is quickly approaching for the Seed to STEM summer workshops. Middle school and high school science teachers wanting to add new labs to their classroom with new lab equipment should consider applying. Teachers will practice up to 12 labs, visit a farm and ethanol plant and will receive \$500 worth of lab equipment. All on-site expenses are paid. Graduate credit will also be available at a cost to the participant. To apply and learn more [visit this link](#).

It's Time to Request Materials for Ag Days

It is that time of year for lots of ag day events and people looking for supplies for booths. As you make your request for supplies here are a couple things to keep in mind. To learn more or to make a request visit [follow this link](#).

1. If you are planning to have a booth or talk to a group of students for only 10-15 minutes, our germination necklaces are the best supplies to request. We provide the talking points for the activity and all the supplies. This is an ideal activity for a group of students you will only see once and for a short amount of time.
2. If you will be seeing a group of students several times over a course of two weeks, requesting an elementary kit might be an option. Many of the kits include activities that involve planting a corn seed and investigating variables that will impact the plant's growth. These kits are available to anyone who will be in a classroom setting with students.
3. When requesting supplies, we ask you provide the number of students and number of teachers that will be at your event. This will help us determine the amount of supplies to send for teachers and students..
4. Kansas Corn provides supplies for booths,. but we are limited on staff available to run the booth. We provide instructions to help anyone in your community who is willing to put on a corn activity. If you are unable to find someone to help with a booth, please contact us, and we will see if there is a farmer nearby who can help.
5. Remember we need a least two weeks to prepare your supplies and get them delivered to you. Plan ahead and send us your request. We are glad to help!

Website Resources

Did you know that Kansas Corn STEM provides additional resources to help with your lessons? Learn more here: www.kscorn.com/education If you are looking for videos to play with your lessons, PowerPoint presentations, 3D printer .stl files, or other resources, we have a library of resources that will continue to grow over time on our website. For Seed to STEM labs, the first place to look is under Teachers Tips for the lab you are teaching. For K-5 lessons, if your book references a video, the website will have those linked and easy to find. [Check it out!](#)



Future Ag Education Teachers Tour East Central Kansas

February came to a close with an incredible learning opportunity for soon-to-be Kansas agricultural education teachers. Kansas State University's agricultural education program partnered with Kansas Corn to host the Kansas Ag-Ed EPIC experience for their graduating seniors. The two-day tour of

east-central Kansas included informative stops at agricultural education programs in the state and visits to a variety of different industry partners.

The experience began with a visit to Midland Genetics, a family owned seed company in Ottawa. Students saw where corn production begins by touring the facility and farm. They discussed new technologies in agriculture and how school programs can partner with the corn industry to tie research and technology into their classrooms. Moving past production, the group visited the BNSF Railway loading facility at Edgerton to discover more about how corn and other products are transported across the nation and the world. Big takeaways were discovering unique career opportunities and a great discussion on how to prepare students for the future role automation may play in the transportation industry. The final stop was visiting an end user of corn, East Kansas Agri-Energy (EKAE) in Garnett. EKAE has been a longtime friend of education and the team there is always willing to host tour groups and teach students about the science behind ethanol production and share opportunities for high school students in STEM.

Additional tour stops included agriculture education classrooms and programs in the area. The group gained exposure to a variety of programs including small and large schools, programs in rural areas, and a program right outside of Olathe. Students were able to explore different agriculture mechanic shops and greenhouse set-ups and gather ideas for their own programs. In addition, students had a chance to ask questions to both new and experienced teachers and receive advice for their first-year teaching. The experience was full of impactful moments for the graduating seniors and all were looking forward to how they could incorporate all they learned into future lessons and create similar learning opportunities for their own students.

Kansas Corn STEM Wins National Award

Kansas Corn Commission was recognized for its Kansas Corn STEM program at the National Corn Growers Association banquet during the Commodity Classic convention in Orlando, Fla. The Reaching for Excellence Award recognizes the top program put on by any state corn association for 2018, and receiving the award is a great honor for the Kansas Corn STEM program. So, what does that mean

for Kansas Teachers? Kansas farmers fund the Kansas Corn STEM program, including all the trainings, materials and funds that go toward creating new lessons and labs. What you, as teachers, receive for free is coming directly from Kansas farmers or Kansas ethanol plants. This award makes farmers aware that what we are doing in Kansas is making a positive impact on science education in Kansas. Thank a farmer and know that you and many other teachers helped make this award possible. To learn more about the award [visit this link.](#)



Jessica Sadler was one of the Seed to STEM lead teachers who attended Commodity Classic, the annual convention of the national corn, soybean, wheat and grain sorghum growers organizations.

Commodity Classic

By Jessica Sadler, Oregon Trail Middle School



I am not sure that anything could have truly prepared me for Commodity Classic. The overall experience was truly incredible. Stepping off the plane in Orlando set the pace and it was go time from there. The first day of the convention brought speakers presenting the newest trends in farming technology through mini sessions, many giveaways from various booths, and the chance to see the Renewable Fuels Association's 85 percent ethanol-powered motorcycle up close and personal. The evening gave all the Seed to STEM lead teachers an opportunity to meet with Kansas Corn board members and gain valuable knowledge for labs and other teaching materials as well as a chance to network with farmers.

Day two of Commodity Classic presented the chance to attend the general session and hear from many valuable agriculture industry leaders. We also heard from motivational speaker Christine Cashen. Attending the convention Seed to STEM lead teachers were able to continue asking questions and collecting information. The Seed to STEM lead teachers and members of the Kansas Corn Commission finished up Friday evening attending the NCGA banquet, where the Kansas Corn Commission was presented with the, National Corn Growers Association's "Reaching for Excellence" award for the Kansas Corn STEM education program. Attending Commodity Classic 2019, was an incredible opportunity, and I am already looking forward to San Antonio 2020.

Ethanol Lessons Featured in National Publication Commitment to Teaching about Ethanol

Recently Kansas Corn STEM was highlighted in the Ethanol Producer Magazine for their commitment to providing lessons and lab resources so teachers can educate about ethanol in the classroom. James Burk, science teacher from Trego County Community High School shared his experiences and success in teaching the topic in the classroom. James, along with Brian Nelson from Hadley Middle School in Wichita, both wrote the Seed to STEM lessons focused on ethanol. With help from Renew Kansas, Kansas Corn STEM can provide distillation kits to Seed to STEM graduates at no cost to the teacher. In addition, any Kansas Ag teacher who is trained to teach the CASE clean smoke lab is eligible for free lab supplies. [Read the full article here](#) to learn about the impact our ethanol lessons are having in Kansas.

Classroom Spotlight

Marais des Cygnes Valley 4th and 5th Grade Corn STEM Summaries from Students

Linda Carson, from Marais des Cygnes Valley Elementary School had the 4th and 5th grades students investigate how to best grow corn. She also had Bill Johnston, Kansas Corn STEM education outreach coordinator, come into the classroom to visit with students more about agriculture and corn. In addition, the high school FFA group conducted a germination necklace activity so the students could see how corn germinates. Kudos to Linda for using Kansas Corn's free resources.



Tell about the process of planting your corn seeds

By Braelyn, student at Marais des Cygnes

January 4, 2019 was the day we planted the seeds. Over a few days my corn plant started to germinate. Over the next couple weeks, it started to put on leaves. We measured in centimeters. By 1/5/19 my plant was 5.5 cm. The other corn seed did not germinate yet. On 1/25/19 it died. I think it died because of lack of room for its roots to grow, or it did not have enough water. I would do this in the future. What I would change is to put it in a bigger container, so it has more room to let the roots go deeper in the soil, so the corn plant can stand up straight. I loved doing this STEM activity.



What was your favorite thing about doing the CORN STEM activities?

By Kate, student at Marais des Cygnes

I think my favorite part was probably watching how the corn seeds did in different conditions and watching them grow. It really made me want to grow more plants and crops.

I think other classes should try to water more often, as that was a bit of a problem for our plants. Another thing that could be changed is the depth of the pot and the amount of soil. Otherwise, this was really a fun activity!

New to Kansas Corn STEM? Check out all of our offerings at www.kscorn.com/education and request materials at <https://kscorn.com/request-materials/>

Email us at education@ksgrains.com

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