

2023 Duke Energy Science Night (DESN) Events in South Carolina

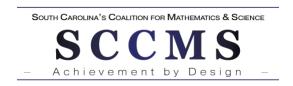
Year 2 Program Data Summary

Geographic Service Area / Event Locations:

- 29 SC counties are in the Duke Energy SC service area. Within those counties there are 49 public school districts. The opportunity to apply for a kit was shared by SCCMS staff with school and district representatives throughout the service area via direct contact (email, phone and/or in-person), social media and/or an electronic newsletter.
- 54 applications were received from schools or districts. Kits were awarded based on a primary goal to serve a diverse group of students as evidenced in school demographics with a secondary goal to serve the broadest geographic area possible. Of the 54 applicants, 16 were repeat applicants who hosted prior DESN events in 2022.
- 40 (an increase of 10 from the prior year) kits were funded by the Duke Energy Foundation and awarded to schools in 30 school districts (including one public charter school district) which represent 21 SC counties. At least one kit was awarded to a school in each eligible district from which an application was received. The representation from schools compared to the prior year indicates a 58% increase (from 19 to 30) in districts represented and a 50% increase (from 14 to 21) in counties represented in the awardee group.
- 15 of the awardee schools were hosting a DESN event for the second consecutive year.
 25 of the awardee schools were hosting a DESN event for the first time.

Participation in events: *

- 7,684 total participants (across all events) (wide range per event from 45 to 480 for after school events). Participants include 6,425 students & family members, 1,026 school staff members and 233 other volunteer supporters.
- 37 of the events were held on dates that coincided with SC STEM Education Month (March 14th – April 14th). All events were hosted by schools between March 14th and April 28th of 2023.
- SCCMS staff visited 26 event sites to offer support and appreciation.



Format options for events: *

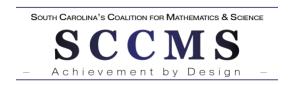
- 90% (36) of the awardees hosted events during after-school hours for students and their families
- 38% (15) of the awardees indicated that the DESN event was the first time their school hosted a science related family engagement event
- A wide variety of settings were planned such as:
 - o District wide event in large outdoor space
 - o Fun community involvement with free food or food trucks
 - Held in conjunction with student exhibits, book fair or other parent engagement opportunities
 - Volunteers from upper grade students assisted with DESN activities or demonstrations of advanced STEM opportunities

Overall satisfaction from school contacts: *

- How would you grade the DESN program overall?
 - o 100% selected "A" (on an A to F scale)
- How would you grade the communications, webinars, and support of the SCCMS team?
 - o 97.5% selected "A", 2.5% selected "B" (on an A to F scale)
- To what extent did your school benefit from the Duke Energy Science Night Activity Kit?
 - 80% selected "Exceeded Expectations", 17.5% selected "A Lot", 2.5% selected other options of "Some", "A Little", or "Not at All"
- When asked to reflect on the observed immediate impact of the event, school leaders responded as follows...

To what extent did the DESN	Exceeded	A lot	Some
event help students/families	Expectations		
Have fun with STEM	95%	5%	
Learn something new	80%	20%	
Engage their curiosity	92.5%	7.5%	
Build excitement about science	87.5%	12.5%	
Become aware of science as part	72.5%	20%	7.5%
of their daily life			
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The options "A little" and "Not at all" were available, but not selected for a response on any part of this question.



General trends from feedback comments provided when school contacts were asked to share key benefits: *

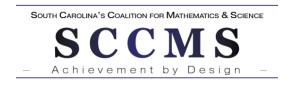
- Family engagement is a win for everyone!
 - "...inviting parents/family members to participate gave them insight into ways they could provide similar learning activities at home for their children."
 - "We are a Title I school and a lot of the families do not go anywhere outside of this town. The fact that this event was held at school gave these families the opportunity to attend something that they would never be able to."
 - "We had so many parents say it was the best engagement night event we've had. It was a great way to connect with families and show our excitement about science."
 - "Our parents became empowered members of their child's educational team and engaged directly in their child's learning. We had engagement not only from our families, but the teacher volunteers and our high school volunteers had a blast! It was so much fun to see a high school senior volunteer work the light up robot station and hear how they were going into electrical engineering after they graduate."
- Hands on science learning is FUN!
 - "The TRUE benefit was seeing the smiles on the faces of the families and the laughter heard throughout our event. EVERYONE, staff included, had a truly FUN-FILLED night with science."
 - "This was our largest attended event to date. Students did not want to leave the event. Students have followed up with their teachers about science concepts that they enjoyed that night and asked for more activities like the ones from the kit. It has sparked a curiosity about science that was not previously there with our students."
 - "Very engaging and was wonderful to see students using higher level thinking skills to build and make things work."
- Teachers who may not normally engage in science learning were given the opportunity to experience STEM and they responded with enthusiasm!
 - "Science education often receives much less emphasis than ELA and Math, although Science touches every facet of life. Students enjoy Science, they are excited by it and they need those hands-on experiences. I believe our Science night provided students with needed experiences and engagement, and for the adults, they were able to see how excited it makes the students so rather than withhold it since it has less impact on the school Report Card, maybe they will pull out the Science Kits and let the students enjoy and learn from them."
 - "The hands-on activities reignited the science and STEM ideas for many of our teachers that has been pushed to the side over the last couple of years. Many teachers have asked to do activities in their class that match their standards."

- The convenience of having "ready to go" resources that are well organized and packaged for ease of use is valuable!
 - o "...getting together materials and planning activities is a big challenge. The fact that everything is ready to go is a big benefit!"
 - "The kit made setup, announcing, and professional development incredibly easier with excellent organization to boot. It also made getting volunteers in the door easier."

Comments from school contacts expressing future interest: *

- "If I can do this, someone with very little Science background, then ANYBODY can have a
 very successful Duke Science STEM Night! Everything is so well thought out and
 planned. Everything is so organized for EACH station! That notebook was exceptional! I
 SO hope that we can do this again next year!"
- "I loved all of it and hope that we can continue to make this a yearly event at (my) School."
- "We loved it. We hope to have another one next year. We look forward to adding additional activities."
- "It truly was fantastic!!! I hope we receive it again next year! From communication with SCCMS to the materials to the support, everything was wonderful!"
- "We hope we are able to give this experience to our students and families every year!"
- "Can we do it again next year? PLEASE!!!"
- "We would love to participate for a third year if this grant is available to us again. We have hosted two really great family nights with the help of this wonderful kit! We love to see our families having fun and in all of the pictures from our family nights with Duke Energy, you can tell families had a blast learning and playing together!"
- "We are very thankful for this opportunity and we hope to have this opportunity in the future!"
- "Thank you for your support in helping teach our students and involve us in creating STEM activities."
- "We hope this can become an annual event at (our school)! Thank you for allowing Clio Elementary to participate this year!"
- "Thanks so much! We will definitely be applying again next year. The ease of the activities and then fun the families had was a great way to welcome families back into our building."
- "Keep offering this opportunity for schools! It is a great family engagement event! We hope to be able to do it again in the future."

^{*} Data collected from post-event survey responses submitted by the school contact at each of the 40 sites which hosted Duke Energy Science Night events. 100% of the awardees participated in the follow-up survey.



Additional outreach efforts conducted by SCCMS to promote the partnership with Duke Energy and Duke Energy Science Night events:

• STEM Day at the Capitol

During this event on April 12, 2023, Tigerron Wells (Director of State Government Affairs for Duke Energy in South Carolina) was a guest speaker. He highlighted the partnership between the Duke Energy Foundation and SCCMS and encouraged educators, students and state leaders to continue to make STEM education a priority.

SCCMS Legislative Reception at EdVenture

On May 9, 2023, SCCMS hosted a family style reception to engage state leaders and other STEM advocates in the experience of STEM learning. At this event, we highlighted the Duke Energy Science Night kits by hosting stations demonstrating four of the activities. Adults and children enjoyed the opportunity to learn about the program and do hands-on STEM activities.

Dream, Imagination, and Gift Development Program (DIG)

As a strategic partner of SCCMS, DIG was provided a kit (funded by SCCMS) to be used as they choose with students in after school or summer programs or at their DIG STEM Fest.

• iMAGINE Upstate

While the original date of this Upstate STEAM Festival was set for April 2023, inclement weather forced SCCMS to reschedule the event for August 26, 2023. A group of SCCMS volunteers will host an interactive exhibit showcasing the DESN activities and allowing attendees to experience STEM fun and learning.

Project information can be found at:

https://www.scstemmonth.org/scdesn.html

Partners for this project include:

- ♦ Duke Energy Foundation
- NCSciFest at the Morehead Planetarium & Science Center at The University of North Carolina at Chapel Hill
- South Carolina's Coalition for Mathematics and Science at Clemson University

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