

Science Night Kits

North Carolina Science Festival offers a Science Night "program in a box" for elementary schools and after school programs. Each kit consists of 12-13 hands-on activities, an instructional guide and all supplies needed to facilitate each activity. Program hosts are encouraged to have a scientist present at each event, and some schools feature an "ask-ascientist" booth manned by professionals from the Fish and Wildlife Office or local doctors and dentists.

The Science Night kits are marketed as a program in a box, but program hosts are encouraged to do as many or as few activities as they choose. If they don't use all activities or materials on the Science Night, they are encouraged to keep the kit and use it however they'd like in the future. The original Science Night was conceptualized as a way to get schools who have never participated in the festival to feel empowered to host a STEM event. In the first year, 25 schools hosted a Science Night. Participation has grown steadily each year, with 110 schools signing up in 2013 and 125 hosting an event in 2014 (with a total attendance of over 25,000 people). The ultimate goal for the program is to have one participating school in each county.

In order to prepare the kits (which have remained the same since 2012), festival organizers sorted through 40-50 activities that were proposed by staff from Morehead Planetarium's after school program. All activities are geared to grades K-5, and all activities can be understood by anyone in 20 minutes. The initial activity front-runners were tested with camp and after school groups, and when selecting the final activities, organizers considered which activity supplies would be easiest to source and ship. For the 2014 festival, a sponsor came forward to cover one additional activity (+supplies). Each kit costs the festival \$250, but cost nothing for first time applicants. Returning schools are asked to pay \$150 for an additional kit, but if they are not able to afford the subsidized kit, accommodations are made so the cost is not prohibitive for them to participate.

Schools, Parent Teacher Organizations, and groups like Boys and Girls Clubs are encouraged to apply to host a Science Night program beginning in August. Once registration closes, the turnaround is quick. Materials ordering begins immediately (generally takes 3 weeks), and

all supplies are sent directly to the fulfillment company (NC uses AllPac Fulfillment) for kit assembly. Science Night Party organizers receive kits in February, and parties are held in March and April. NC organizer Marissa oversees the fulfilment process and serves as an advisor and cheerleader for Science Night Party hosts. Once March and April rolls around, she tries to attend as many of the parties as she can where she serves as photographer, event support, and she'll even run an activity table occasionally.

In 2014, several kits were awarded to middle and high schools to facilitate with their local elementary school partners. This type of partnership turned out to be extremely rewarding. In one case, a remedial science middle school class spent a semester work-shopping the kit activities to get ready to facilitate for elementary students. Event organizers were sure to stress that prepping the older students to facilitate was key and end the end, both groups (student facilitators and student attendees) benefited from the experience.

Festival organizers provide benchmarks for event planning and a webinar training for event organizers. This webinar highlighted two of the more misunderstood activities in the kit, outlined best practices for the program, and allowed an opportunity for questions to be asked and answered in real time. Festival organizers found that the trainings were not very well attended, but the feeling was that this was due to the timing of the trainings and the fact that technology in the schools can be an obstacle.

At the outset of the initiative, there was a budget devoted to evaluation. Now that there is enough data to support the program, formal evaluations were discontinued and current evaluation is done by sending out an open ended request for feedback. Festival organizers continue to be impressed with the creativity the schools show in making the program their own.

Helpful Hints from Festival Organizers:

- Listen to event hosts
- Visit with organizers and follow up on questions and concerns
- Lean on the support of work study students or interns

In each kit:

- Facilitation guide
- Supplies for each activity
- Press-kit including press release templates, Facebook templates