



## Dark Skies & Energy Education Program



### What is the “Dark Skies & Energy Education” Program?

Dark skies are a natural resource that is rapidly disappearing from the nighttime landscape all over the Earth. While a night devoid of excessive lighting is critical to astronomy, we are also finding that the proliferation of inefficient, artificial lights are impacting everything from human health to plant and animal ecosystems and driving up energy consumption and cost. This program educates students on how to identify inefficient lighting, provides alternatives and tools that reduce consumption, keeps energy costs in check, and helps communities regain and safeguard a precious resource - a dark nighttime sky.

### Education is Vital.

Education is vital not only for identifying the challenges, but also in developing intelligent and cost-effective alternatives and solutions. With this in mind, a “**Dark Skies & Energy Education Kit**” has been developed for delivery to secondary school classrooms. In our programs, teacher participants receive at least two rounds of professional development on all program activities, experiments, and projects. The kit helps teachers develop the concept of dark skies and energy usage and conservation across a wide range of curriculum, including science, math, and even writing and art, addressing **local educational standards**, as well as the New Generation Science Standards. The entire program is designed to help students, parents, and the community identify dark sky resources, lighting, and energy issues, and to assess their status, efficiency, and effectiveness.

### What are the Program Components?

After the teachers receive their kits and training, everything moves to the classroom. Students will have a wide variety of hands-on, inquiry-based resources at their disposal. The kit contains educational and fun experiments on “**Light Shielding**”, “**The Spectra of Lights**”, and an “**Outdoor Lighting Audit**”. There is an activity on the impact of lighting on sea turtles called “**The Night You Hatched**”. There are activities for participating in a “citizen science” campaign called “**Globe at Night**”. It all comes together when the teacher works with program developers to select a class research project that is presented at a **Family Science Night**.

For more details, contact **Connie Walker** ([cwalker@noao.edu](mailto:cwalker@noao.edu)).