



Joshua H. Ring
September 10, 2015

To Whom It May Concern:

As a faculty member focusing on science and math education at Nichols School, I am pleased to support the University at Buffalo's pursuit of an innovation credit for the development of the **UB Solar Strand mobile application** as it relates to the Association for the Advancement of Sustainability in Higher Education STARS program.

Nichols School is a nationally recognized college preparatory coed independent school with a 122-year history in Buffalo. Nichols enjoys an ongoing relationship with the University at Buffalo and interacts with the University in a number of meaningful ways to the benefit of our students; e.g. field trips to the university's seismology engineering lab, participation in UB's Distinguished Speaker series, and students involved in research experience.

On Earth Day 2015, my colleagues and I brought the Nichols 5th grade class to the UB Solar Strand to participate in an exciting educational program involving their new Solar Strand mobile application.

The UB Solar Strand is a 750 kW photovoltaic (PV) installation unique in its design and intent. The Strand was created as a demonstration project to help advance the development of solar technologies in NY, and was designed to be a publicly accessible, hands-on learning resource for the community. However, the Strand can be an intimidating place to visit and explore even to those most interested in learning more. As it had been explained to me, the Solar Strand app was created to help guide visitors through the site, communicate the vision behind its creation, and encourage engagement and hands-on exploration of the physical site. The app provides informal learning opportunities for Solar Strand visitors presenting "learning stations" each with distinct videos, graphics and information on the Solar Strand's design, real-time power production and more. Using global positioning satellite tracking, the app provides a real time situational tutorial for the visitor as they move around the park-like setting. The information is presented in a compelling and high tech manner but easily accessible for students and visitors of all educational levels, providing a deeper understanding of the implications of the installation.

Using the Solar Strand mobile app as a tool our students were able to explore and discover the site at their own pace and according to their interests, and experience the UB Solar Strand in a totally unique and innovative way. The mobile app provided my students with an opportunity to:

- learn the vision and intent of the Solar Strand project
- appreciate how the Solar Strand contributes to UB's long-term sustainability goals
- understand how this project contributes to increasing awareness of sustainable practices throughout the Buffalo-Niagara region and how it reinforces our long history of sustainably-focused innovation
- form a greater understanding of the technology behind photovoltaic technology, and a renewed appreciation for the importance of the sun in regards to natural systems
- learn about the physical space surrounding the Solar Strand site from an ecological perspective specifically in regards to flora and fauna

I believe that the Solar Strand Mobile Application meets and exceeds the criteria as a unique and extraordinary sustainable action taken by the University at Buffalo. I hope that you will join me in affirming the validity of this project as an action worthy of an AASHE STARS Innovation Credit.

Sincerely,

Josh Ring, Science and Math Faculty
Nichols School