WISE E/PO Formal Education Activities

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WISE Public Website

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SEGway
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SEGway began as a consortium of scientists and educators to develop web-based space science lessons for K-12 education.

It has now grown to become the umbrella organization for the E/PO programs of several NASA space science investigations.

By combining the efforts of these programs with each other and through additional partnerships we are able to expand the impact that any single mission could make alone.

SEGway E/PO programs:
- FAST – Aurorae (Launched 1996)
- RHESSI – Solar Flares (Launched 2002)
- CHIPS – Interstellar Medium (Launched 2003)
- THEMIS – Auroral Substorms (2006)
- WISE – All-sky infrared survey (2008)
- NVO – Internet library of Astronomical Data
SEGway Lessons

SEGway web-based modules for use inside and outside the classroom

Lessons developed in partnership with teachers and scientists

Aligned to national science education standards (now also with California standards)

Teacher summary pages for all lessons

Original lessons cover broad topics in Earth and Space Sciences

Modules originally co-hosted by museum partners...now primarily SEGway
More recent lessons have been focused on science of SEGway missions.

*Exploring Magnetism* is a series of teachers guides with hands-on inquiry-based activities that explore magnetism in the context of space science missions.

*CHIPS SCIENCE INVESTIGATION: Exploring the Interstellar Medium* also uses hands-on activities to examine basic physic concepts that help students understand the interstellar medium.

For WISE we will develop lessons about basic science and math concepts relating to mission investigations – we will also fill in gaps (not re-invent the wheel).
Teacher Professional Development

To feel confident in teaching space science lessons in the classroom teachers need training in content, curricula, and pedagogy.

SEGway participates in teacher PD in:

• Short workshops at national and regional conferences (e.g. NSTA, CSTA, SACNAS, etc.)

• Special training workshops with partners (e.g. GEMS site launches, SEU EA training, SEU modeling the Universe short course, etc.)

• One and two-day workshops at UC Berkeley SSL in partnership with SECEF and LHS GEMS.
SEGway workshops showcase not only our own resources but other great resources relevant to the workshop content:

GEMS guides, NASA mission E/PO resources, and other NASA education resources (e.g. *Eye on the Sky, S.O.N.*)

SEGway workshops feature a mix of hands-on activities, group discussions, and science content presentations.

For WISE, SEGway will conduct additional workshops integrating the science themes of the mission.
Features include:

- Mission Information
- WISE Science Essays
- Mission News and Events
- Education Resources
- Multimedia Gallery
- Section for Astronomers