What’s New, and Coming Soon?

Website: wwtambassadors.org

WWTVizLabs

A screenshot from the 3D cosmos model in WWTVizLabs, showing stars in the constellation Orion, as seen from our viewpoint on Earth.

The new WWTVizLabs focus on teaching particular astrophysical concepts, offering learners literally new “perspectives” on commonly misunderstood ideas. This particular example shows what Orion would look like from “above Orion’s head,” and other WWTVizLabs focus on moon phases and seasons.

What Have WWT Ambassadors done so far?

Pilot Study, Boston-Area Schools, 2009-11

Ambassadors Harvard undergraduates, graduate students, postdocs, faculty, and astrophysics-literate retirees and amateur astronomers.

Students and Teachers Sixth-grade students (more than 400 so far), and four different teachers.

Results EXTRAORDINARY. This graph shows the differences after six weeks of studying astronomy, between two groups of 80 students: Group A used WWT, and Group B did not. On the graph, “Effect Size” measures the change in opinion before and after the six weeks.

(Data shown are from Clarke School, Lexington, MA.)

Science Fairs and More... Our fantastic Ambassadors have deployed WWT in many “informal” educational settings as well. At venues ranging from small undergraduate seminars to the USA Science Festival on the DC Mall, all who see WWT seem to love, and learn from, it.

Tour Creation Ambassadors also create content in the form of Tours. WWT Tours are guided paths through the universe, teaching particular concepts and/or showing a tourist particular places on the sky or in the Universe. In their school-based work, Ambassadors help students to create their own Tours, and we have found this tour creation to be a key learning experience for all.

Funding and Goals

Goals
Create a comprehensive Collection of WWT Tours and learning resources, covering the key concepts of modern Astronomy and Astrophysics, to be made freely available online to all.

Expand the set of WWT VizLabs modules to provide teachers with ready-to-use, inquiry based content aligned to the new science education framework.

Encourage an online participatory culture where teachers and students learn from each other and share tours and resources they’ve created.

Expand WWT’s reach, both in the physical world, and online.

How can YOU help?

Become an Ambassador!
If you would like to bring WWT into your community, we can help. We can’t yet (see Funding, above) offer to make you part of our research study, but we can definitely give you access to all the material we’ve developed that’s online, and give you tips on partnering with local schools and other venues.

If you would like to make Tours, we’d be thrilled! We have specific needs, topic-wise, and we’d be happy to suggest topics. If your tour makes it through our astrophysics-vetting process, we will be happy to add it to the official WWT collection!

We are also happy for any suggestions you’d like to make on improving our Program, or linking it to other related efforts.

If you read this far, ask about the dog!

Funding
Presently, WWT is supported by a gift to Harvard from Microsoft Research.

Several proposals have been submitted, and are in the works, each aimed at addressing one or more of these goals. Proposals are in at NSF and the Department of Education, but finding programs interested in not just research on, but also deployment of, novel research-data-based multimedia-rich programs like WWT is hard!

We are actively seeking private individual and foundation donations to expand WWT, so please do let us know if you have any ideas on that!