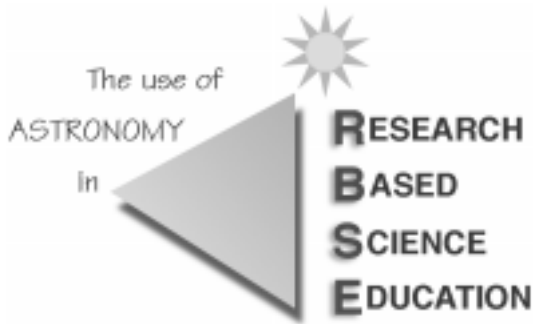


NOAO Educational Outreach

Suzanne Jacoby, for NOAO Educational Outreach



The third annual workshop for middle and high school teachers on “The Use of Astronomy in Research Based Science Education (RBSE)” hosted 15 participants from around the country in Tucson and on Kitt Peak this past summer. A total of 41 teachers have been trained in this NSF-funded Teacher Enhancement Program to date. Recruitment is underway for our fourth summer workshop in 2000. Mentors were located for all teachers in the 1999 program; we are pleased to acknowledge these astronomers for their support:

Catherine Pilachowski (NOAO)
Shawn Cruzen (Columbus State)
William Keel (Alabama)
Jose L. Alonso (Arecibo)
Pamela Marcum (Texas Christian)
Heather Morrison (Case Western)
Mark Adams (McDonald)
Margaren Hanson (Cincinnati)
Deborah Golader (Pennsylvania)
Ted Williams (Rutgers)
Michael J. Wolff (SSI)
Daniel Boice (SRI)
Wayne Osborn (Central Michigan)
Glenn Williams (Central Michigan)
Tim Barker (Wheaton College)

A total of 22 telescope-nights were used in support of the RBSE Teacher Enhancement Program in the last quarter: eleven on the 0.9-m, four on the 4-m, and seven nights on the 2.1-m. Results of one of the three RBSE research projects, “Searching for Novae in Local Group Galaxies,” will be presented as a poster paper at the Atlanta AAS Meeting by KPNO astronomer Travis Rector and Brenda Wolpa. Brenda is a chemistry teacher at Canyon Del Oro High School in Tucson who also works part-time for NOAO Educational Outreach. Our updated web pages at <http://www.noao.edu/outreach/rbse/> contain additional information about the RBSE program.



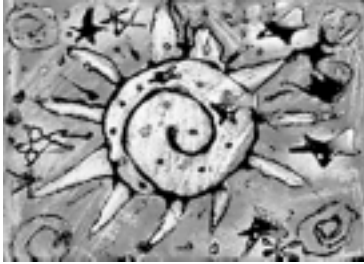
The fourth annual NOAO-hosted Project ASTRO-Tucson workshop took place in September with 39 participants, bringing the number of astronomers and teachers trained in the Tucson area to nearly 200. This was a bittersweet workshop for the Tucson project, as our three years of start-up funding for Project ASTRO-Tucson have expired and additional funds have not been secured to continue the project at its current level. As a result, Ginny Beal will reduce her hours from full-time to half-time as our Education Program Coordinator. Ginny’s dedication, enthusiasm, and personal commitment to the goals of

Project ASTRO are largely responsible for the success the project has experienced in Tucson. She will continue to support ASTRO-Tucson in her half-time position, but we are not confident of being able to run a fifth annual workshop until additional funding sources are identified.

Meanwhile, Project ASTRO is evolving in Tucson to best meet the needs of our local educational community. This includes having teachers gain more astronomy content knowledge through the program, increasing the emphasis on inquiry as a pedagogical method at the workshop, and exploring ways to have teacher partners less dependent on their astronomers. Even in astronomer-rich Tucson, we are experiencing a shortage of astronomers, compared to the number of teachers, who wish to participate in Project ASTRO.

Authors Gina Rester-Zodrow and Joni Chancer came to Tucson to participate in our September workshop and present ideas from their book "Moon Journals—Art, Writing, and Inquiry through Focused Nature Study." Our Project ASTRO coalition, particularly the Tucson Unified School District, is interested in developing interdisciplinary ways of teaching science through inquiry, and in using the student-developed journals as an assessment tool. Project ASTRO's emphasis on hands-on, inquiry-based activities provides a way to extend the concepts of Moon Journals into authentic scientific observation. We'll see over the next year where these overlapping ideas lead as our collaborations continue. More information on Project ASTRO-Tucson and our last workshop including the Moon Journals ideas can be obtained from a media advisory at <http://www.noao.edu/outreach/press/>.

Outreach Web Pages



By splicing together two E/PO supplements with some NOAO dollars, we have been able to add a Web Designer to the NOAO EO staff. Mark Newhouse is working to bring a consistent look and feel to the Outreach web pages, and we encourage you to take a look at these newly available materials:

An on-line Virtual Tour of Kitt Peak National Observatory is now available at <http://www.noao.edu/outreach/kptour/>. The bulk of the work for the tour was done by Rick Donahue, a middle school technology teacher from Eastchester, NY and an RBSE 1998 participant, who spent a month with the Educational Outreach group over the summer of 1999 funded by a Teacher Supplement to our Research Experience for Undergraduates program.

The "Jewels of the Night," an educational module for measuring the color and brightness of stars in the Jewelbox Cluster, was added to the NOAO Educational Outreach web pages. This activity was developed by NOAO astronomer Caty Pilachowski, in collaboration with Jeff Lockwood and other Tucson teachers. The activity has been extensively tested over the past two years, in Tucson schools and at the Flagstaff AASTRA summer workshops. Teacher notes and classroom materials can be downloaded and printed from <http://www.noao.edu/education/jewels/>; a color printer is required.

"A Resource List about the Sun"—a printed brochure listing books, periodicals, and URLs about the Sun—was produced by the Educational Outreach Office as part of our effort to more efficiently handle information requests. This is the first in what will be a series of thematic resource lists. We encourage you to download and print the PDF version of the brochure for local distribution. Go to <http://www.noao.edu/outreach/resource/sun.html>.

