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Workshop: Engaging Everyday Students in Real Astronomical Research STEPHANIE SLATER, Center for Astronomy and Physics Education Research — The latest National Research Council publications describing effective learning environments call for all students to engage in scientific research and participate in scientific discourse – in short, to do science themselves rather than just learn about it. Modern cognitive science results demonstrate that in order for novice science students to effectively design, conduct, report, and defend science observations and experiments, learners must be purposefully supported in each step of the scientific process before they are able to successfully pursue scientific questions of their own design. This participatory workshop provides strategies for bringing these two ideas together. It is an introduction to scaffolding strategies that teach students to fruitfully engage in scientific thinking and design astronomy investigations by mining online astronomy databases. Participants in this workshop will learn how to structure effective student learning experiences using online resources such as GalaxyZoo access to the Sloan Digital Sky Survey and JPL's Solar System Simulator. Participants are encouraged to bring their personal laptop computers.

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