Astro-Venture: Engaging Students in Grades 5-8 in VPL Research as They Design A Habitable Planet

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In collaboration with NAI central, the Virtual Planet Laboratory (VPL) and NASA Education, the NASA Ames Educational Technology Team is currently developing a simulation activity entitled "Design a Planet." This exciting activity engages students in the stimulating problem of identifying parameters that will result in a habitable planet. It acts as both a culminating activity that builds on the seven multimedia modules and four educator guides on the current Website, as well as a stand-alone activity that can be used in an informal education environment.

Astro-Venture http://astroventure.arc.nasa.gov is an educational, interactive, multimedia Website that engages students in grades 5-8 in the astrobiology themes of: "Habitable Planets" and "Life in our Solar System." This product seeks to foster the development of the next generation of astrobiologists by providing an age-appropriate opportunity for students to role-play NASA occupations, as they search for and design a planet that would be habitable to humans. Astro-Venture includes modules and lessons in astronomy, geology, atmospheric science and biology.

Design a Planet will be launched in the fall of 2005, providing the Web site's overall motivation and culminating assessment. It will also integrate VPL scientists and the modeling work they are conducting in an effort to recognize the presence of life on estrasolar planets by identifying the signs of life in planetary spectra. Design a Planet will be a much simpler simulation than VPL's models but will provide students with a sense of the purpose of computer modeling as well as career information in this area.