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## Physics-based space flight simulation game competition to promote space enthusiasm in classroom

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"Space Youth Challenge" is a competition in which teams of 5 students use the game "Kerbal Space Program" to dream up their space missions and then execute them in-game in according to the laws modeled after real laws of physics. Participants get to put the knowledge they learn in schools from physics, celestial mechanics, newton's law of motions, vectors, torque, aerodynamics, etc. into practice. Over the 3 seasons of Space Youth Challenge we have received nearly 1,997 participants from 472 teams. The responses to the competition are overwhelmingly positive and have proven that video game can also be a powerful alternative to conventional formal education in schools on top of allowing artistic freedom and teaching basic video editing skills which is arguable one of the most important skills in this era.

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