

Abstract Submitted
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EJS enhances traditional learning in freshman mechanics¹ AMY BUG, JEN TRINH, Swarthmore College — Easy Java Simulations (EJS) is a freeware authoring tool (part of the Open Source Physics project) [1]. EJS allows not only physics teachers, but students as well, to produce nonproprietary, platform-independent simulations with both numerical and graphical output. We report on the use of EJS as a helpful tool in a physics course for majors. In particular, EJS allows a student to conceptualize tough introductory material such as kinematics in polar coordinates and conservation of momentum with mass-transfer. The construction of an EJS simulation gives the student an environment in which to surmount both conceptual and mathematical roadblocks to learning. [1] <http://www.opensourcephysics.org/>

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