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Cloud computing in nanoHUB powering education and research

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ABSTRACT

nanoHUB.org is designed to provide instructors and students enjoyable and effective learning tools through which to explore nanotechnology across a range of application areas. In fact, a significant number of nanoHUB users are learners. Furthermore, nanoHUB is used in all of the top 50 US engineering schools and is increasingly used in the flipped mode in the engineering and science curricula. In this discussion, we discuss the educational strategy that drives nanoHUB and its impact on student learning. The discussion also discusses the methods nanoHUB is pioneering to address three major educational challenges in the areas of: (1) personalizing learning within nanoHUB; (2) strengthening and expanding the nanoeducation pipeline; and (3) research and developing new content strategies.