Current college students are accustomed to documenting and sharing their experiences through text, photo, and video, thanks to the ready availability of all of these through personal portable devices. The democratization of video production and access has lead to the possibility to both teach and learn with video as never before. This work seeks to capitalize on student expectations and the current technological environment to bring the benefits of both teaching and learning with video into core technical undergraduate engineering courses. Specifically, in this work we ask student teams to create short, targeted, easy to understand videos about concepts in thermodynamics, and then invite them to watch the faculty-vetted library of videos developed by their peers at their own and two collaborating institutions. We are studying changes in students' conceptual learning as a result of participation in this program, and are building a repository of accurate, engaging, videos for thermodynamics learning that will ultimately be shared with other instructors and the public.