The calculus-based physics sequence at the University of Arkansas-Fayetteville was revised to feature inquiry-based methods as part of the PhysTEC project in 2001. Since this time, the sequence has been a key component to the exceptional growth of the undergraduate physics program and its production of physics teachers. In line with the university system’s strategic goals for online education, online lecture sections were added to the sequence in the Spring 2013 semester. Measurement of a mid-semester introduction of the lecture option in Fall 2012 showed that the change to online lecture was educationally neutral, but that lower performing students elected higher levels of the replacement of face-to-face (f2f) lecture with video. While educationally equivalent, the online lecture sections suffered significantly higher withdrawal rates than f2f sections. This effect is not yet fully understood, but 50% of the anomalous withdrawal rate results from students repeating the class electing online sections, and then withdrawing at very high rates. To improve ease of transfer between university campuses, the university began offering its first-semester, calculus-based physics class online to other campuses of the University of Arkansas during the Fall 2013 semester. This required the production of online laboratories. These laboratories used a mix of simulations and video recording of experiments to replace f2f laboratories. Our experiences with taking a very well understood and highly successful course sequence online have been mixed. Some experiences suggest that online options can be an effective replacement of f2f options; some experiences suggest that caution is appropriate when considering replacing f2f experiences with online options.