Given the confines of the system and the curriculum, it is not evident that our institutions have any genuine interest in generating scientific inquirers. Within this construct, I believe that an effective instructor should embrace rote methods to deliver the service for which the student is paying: training for future job prospects. In my experience, attempts to extend the curriculum beyond what can be learned by rote are usually interpreted by over-burdened students as additional demands, leading to resentment toward the subject. Given the absence of the political will to re-structure the introductory college science curriculum and the consequent necessity of rote methods, what can an individual instructor do to lead students to authentic scientific inquiry? This is, unfortunately, something that committed instructors are left to do on their own time for a subset of motivated students. The challenge for instructors is to pique the interest and curiosity of the students (within our very limited contact hours) sufficiently as to stimulate them to seek learning opportunities outside the classroom.