

I believe the blog question was how we encourage students to be independent, independent thinkers and independent problem solvers. The premise of the question revolves around the word independent/individual. The first obvious question that comes to mind is how do we encourage students to be independent thinkers and individuals in a uniformed populous where uniform tests are given with measured predetermined content describing desired interpretative concepts and ideas? Secondly how can we as teachers be considered individual when what we teach and when we teach it is dictated elsewhere by what I would assume are the academic gods or demigods who decide standards for the mass education system that does not acknowledge the individual or individual needs. This of course implies that the huge system of education has a problem with individuality and the only way to encourage individuality is to change or rid yourself of the system. One problem, the educational system demands conformity and uniformity and with sheer force of size and government support it can easily crush non conformity with a simple decertification rendering the student, teacher, school irrelevant devoid of merit, an empty building, a parking lot. So it is safe to conclude that the education system subjugates us to conformity and uniformity. We must teach what we are to teach when we are to teach it. The mind or minds of a class are not permitted to wander when a rich vein of ideas are uncovered and interest demands more time to explore ideas and concepts but is impossible because there is a schedule and time table that dictates our pace of learning. The schedule becomes more important than learning and not all that is on the schedule may be of interest or of need of students to learn. It may also have nothing to do with the student's life or way of thinking. It may simply have little or no relevance in their academic, creative or social life. It is merely something someone somewhere decided for whatever reason that a student at a certain age must know this information for them to be deemed intelligent and worthy to advance in the educational spotlight of the system.

The Idea of individualism in this mass system seems remote if not impossible or at best greatly restricted. So how does one become assertive and become an individual in such an oppressive system? I contend that by simply asking questions the mass production system comes to a halt or brief pause to answer a simple question, an act of an individual. A mere simple question transforms the questioner into China's infamous Tank man, the lone individual that brought the oppressive military might of China to a halt or temporary Pause while they pondered how to answer/respond to the individuals act of courage/defiance. To encourage individualism we must encourage the questioning of course content, content information, content relevance, repeat the question, repeat the answer, explain clearer or in a different medium or form of communication, why is that right, why is this wrong, how did you get that solution, can you see how I came to this solution, why are we doing/studying this..... are the questions that lead to individualism. The question is the only individual means to arrive at an individually informed conclusion and the only way of potentially reaching a creative solution to standards and standardized questions.

I would like to continue with a side diversion of peering into our academic past and traditions. All of the traditions I will mention are from Sir Ken Robinson's book *The Element, How Finding Your Passion Changes Everything*. To begin Sir Robinson point out that the standardized test industry is a multibillion dollar business and has a vested interest in standard tests ability to identify and quantify intelligence

and their identifiable intelligence is the only reliable indicator of an individual's success academically and in our free market economy. And like any other multibillion dollar enterprise it is fully invested in local, state and federal governments that grants divine rights to such organizations of vast wealth.

Moving on to the IQ test. Alfred Binet, one of the creators of the IQ test intended the test to be used to identify students with special needs so they could receive appropriate forms of schooling. The test was never meant to measure degrees of intelligence or mental worth. Binet himself indicated that the scale he created "does not permit the measure of intelligence, because intellectual qualities are not superposable, and therefore cannot be measured as linear surfaces are measured." The Idea of the IQ test also implies that intelligence is a fixed quantity which has been proven not to be the case.

The next step in the evolution of the IQ test comes from Stanford University's Lewis Terman. He modified the test into what is called the Stanford-Binet Test, now in its 5th version is the basis for the modern IQ test. These are the Terman's word from the textbook *The Measurement of Intelligence*: "Among laboring men and servant girls there are thousands like them feebleminded. They are the world's 'hewers of wood and drawers of water.' And yet, as far as intelligence is concerned, the tests have told the truth.... No amount of school instruction will ever make them intelligent voters or capable voters in the true sense of the word." Terman was an active member of the eugenics movement in education. Sir Robbins describes eugenics movement as "a movement sought to weed out entire sectors of the population by arguing that such traits as criminality and pauperism were hereditary, and that it was possible to identify these traits through intelligence testing." The movement claimed entire ethnic groups such as southern Europeans, Jews, Africans and Latinos fell into this non or low intelligence group. They also concluded that this group should be segregated in special classes and given instruction which is concrete and practical which would also keep them uneducated and members of a servant class. They also determined that members of these groups should be sterilized to prevent further breeding and successfully lobbied thirty states to pass involuntary sterilization laws.

The next big step in intelligence testing is the SAT and ACT tests that have been reigning supreme for over 8 decades. The SAT came from the mind of eugenicist Carl Brigham. Shortly after its invention Harvard and other Ivy League schools began using it as a measure of a student applicant's acceptability. The problem with the SAT and ACT is that it only measures a very limit range of intelligence. John Katzman of the Princeton Review offers the following criticism: "What makes the SAT bad is that it has nothing to do with what kids learn in high school. As a result, it creates a sort of shadow curriculum that furthers the goals of neither educators nor students....The Sat has been sold as a snake oil; it measured intelligence, verified high school GPA, and predicted college grades. In fact, it's never done the first two at all, nor a particularly good job at the third."

How has Education evolved since these dark and even present days? Fortunately it is politically incorrect to be racists and we certainly can't go around sterilizing large segments of the populations for their nonconformity or cultural differences. However we are still the instrument of subjugation. We sort and divide who will go where and who in our eyes will succeed in our own mold and cast the rest down to servitude. Fortunately it doesn't work that way. Many succeed and prosper in spite of school.

Many survive school and become successful, productive and creative individuals whose intelligence could not be imagined let alone be measured by the narrowness of our education system.

The moral of the story? Don't presume that the failing student is less intelligent than you. Education is asking the wrong question. The question is not how intelligent are you but how are you intelligent.

