Blame the High Schools, Not the High School Graduates July 10, 2017

Female graduates of New York City public high schools applying to the City University of New York (CUNY) find mathematics the insurmountable barrier to transitioning smoothly from high school to college. If they fail to demonstrate "college readiness" in Mathematics, Reading, and Writing (with sufficiently high SAT, ACT, or NY State Regents Test scores), they are required to take CUNY Assessment Tests. Anyone who does not pass these Assessment Tests must take (and pass, of course) costly, zero-credit remedial courses (that may take multiple semesters to complete) before they can start college-level work. Many never successfully complete these remedial courses; they drop out of college before they actually start college—but with hefty financial aid debt.

2014 CUNY Assessment Test data obtained from CUNY and analyzed[§] by Helicon, Inc. reveal that 10,293 females (77% of whom were women of color) took a total of 28,837 CUNY Assessment Tests. Again, the Mathematics Tests were taken most frequently (17,761 times in total: 9,779 Math 2 Tests and 7,982 Math 1 Tests) and failed most frequently (14, 289 times in total: 7,806 Math 2 Tests and 6,483 Math 1 Tests. (Examinees took the Math 2 Test [elementary algebra] first; anyone who failed this Test was required to take the Math 1 Test [pre-algebra].) Females failed the Tests at these rates: Math 2, 81%; Math 1 80%; Reading, 42% for and Writing, 43%. The mean scores of the women for the four Tests were: Math 2, 35; Math 1, 30; Reading, 70; and Writing, 55. Their single Test failure rates (i.e., three Tests taken; one failed) were: 89% for Math 2, 4% for Reading, and 7% for Writing. (Their male counterparts fared almost as badly. Male failure rates were: Math 2, 69%; Math 1, 79%; Reading, 39; and Writing, 52%. Mean scores were: Math 2, 40; Math 1, 30; Reading, 72; and writing, 53. Single Test failures rates were: Math 2, 83%; Reading, 3%; and Writing, 14%.)

[§]Analysis of City University of New York 2014 Assessment Test Results (available on request at www.heliconinc.org)





A college education may be one of the best investments of time and money for a person's career. Attending college provides opportunities that are not as numerous or prevalent to those who don't attend; and persons with college degrees typically fare better than persons who only have high school diplomas. For one thing, college graduates acquire a set of superior life skills (critical thinking, problem solving, communication, self-discipline, time management, etc.) that serve them well as they cultivate their careers. (There's another major difference! College graduates tend to have *careers*; while high school graduates have *jobs*.) For another thing, college graduates generally have higher lifetime earnings: according to the Bureau of Labor Statistics (*Highlights of Women's Earnings in 2014*), female high school graduates earned a little more than half (\$578) of what female college graduates earned (\$1,049) per week—which averages out to about a \$1,000,000 more per working lifetime!

Clearly, the women who seek the benefits of a college education but are woefully unprepared for the rigors of college work (having been failed by K - 12 New York City Public Schools) deserve a *free*, comprehensive mathematics remediation program that will enable them to "do the math" at a college level.