Leora Boussie – Wellesley College
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Wellesley College was founded in 1870 in Wellesley, Massachusetts. It is a private liberal arts college for women, a member of the original Seven Sisters, and is ranked as one of the top liberal arts colleges in the United States. Wellesley regards the liberal arts as “the foundation of a fully rounded undergraduate education” and “essential to the 21st-century world.” Traditionally, liberal arts colleges focus on broad skills in thinking and writing. Courses such as literature, philosophy, history, and religion are often required of all students who pursue a liberal arts education. The sciences can be overshadowed by these heavy humanities requirements. At Wellesley, the general education requirements are as follows:

All entering students are required to complete one semester of expository writing in their first year.
Foreign Language Requirement.
Quantitative Reasoning Requirement.
Three units total in Language and Literature and Visual Arts, Music, Theater, Film and Video
One unit in Social and Behavioral Analysis
Two units total from two of the following three distribution areas: Epistemology and Cognition; Religion, Ethics, and Moral Philosophy; and Historical Studies
Three units total in Natural and Physical Science and Mathematical Modeling and Problem Solving. At least one unit must be a laboratory unit.

Four STEM courses seems impressive at first look, especially considering that one of those courses must be a laboratory course. However, if you take a step back and look at the distribution of the requirements, it is easy to see that twice as many humanities courses are required. Wellesley offers a wide range of STEM majors, including astronomy, astrophysics, biochemistry, biology, chemistry, computer science, environmental studies, geosciences, math, neuroscience, and physics. But when the liberal arts curriculum promoted by the school is so heavily focused on humanities, how can students get the exposure to sciences that might make them more interested in pursuing a STEM degree?

Wellesley makes impressive efforts to promote science education in other ways. With a 7:1 student faculty ratio, students are able to collaborate closely with professors on research projects. The college also highlights the advantages of studying the sciences in the Boston- students can easily commute to a variety of advanced medical and research institutions. Students can also cross-register with Massachusetts Institute of Technology and Olin College of Engineering, which opens up more STEM classrooms to the young women of Wellesley.

Barnard College is also known for its commitment to a liberal arts curriculum. Like Wellesley’s program, Barnard’s requires many more humanities courses than science courses. Barnard students are required to take a seminar and english course during their first year. Cultures In Comparison, Historical Studies, Language, Literature, Ethics and Values, Social Analysis, Visual Arts, Lab Science, and Quantitative Reasoning make up the rest of Barnard’s Nine Ways of Knowing. Again, it is easy to see that only two of the nine requirements are STEM courses, and that is not even including the first year seminar and english courses. What efforts does Barnard make to promote science education?

Like Wellesley, Barnard offers a variety of STEM majors. Students also have access to Columbia math and science courses. Barnard has a STEM program, which includes a set of speaker series panels held throughout the academic year and provides students with “insider tips to make themselves competitive candidates for internships, research positions and ultimately the career of choice.” Barnard also has a Student Summer Research Initiative which funds students to do research in different labs over the summer. Like Wellesley, Barnard is located near numerous incredible research institutions and hospitals and is also affiliated with Columbia, one of the biggest research universities in the world.

The STEM programming and initiatives of Wellesley and Barnard serve to expose more students to the sciences, ultimately balancing the emphasis on humanities in their curricula and shaping successful scientists and doctors. Sixty percent of Wellesley’s biological chemistry majors entered graduate or professional school following graduation. Wellesley also has a seventy percent acceptance rate to medical school in recent years, significantly higher than the national average of forty-five percent. Wellesley students work for NASA, Johns Hopkins, and U.S. Geological Survey. Barnard ranks third among liberal arts colleges in graduates who earn a Ph.D. Barnard also ranks first among select U.S colleges in the number of women graduates who are now professors of chemistry. It is also one of the top schools in the nation in the number of female graduates who have entered the medical profession. Perhaps it is the academic well-roundedness of Wellesley and Barnard students that makes them so successful in the sciences? I hope to work to answer this question and other questions about the sciences at Barnard over the course of the semester.