

Discussion Guide for Teachers

Interviewer: Hannah Gruenberg

Interview subject: Dr. Lois Graham

Date of interview: February 28, 2011

Dr. Lois Graham was born in 1925. In 1945, she was the first woman to graduate from Rensselaer Polytechnic Institute with an engineering degree. She went on to the University of Illinois to become the first woman in the U.S. to earn her Ph.D. in mechanical engineering. She dedicated the rest of her life to teaching engineering and to promoting engineering as a field for women to enter. Dr. Graham was heavily involved in many early efforts to introduce girls to jobs in math and science, volunteering her time on weekends to visit high schools and teach girls. She also was involved in many engineering societies, including the Society of Women Engineers, of which she was president from 1955-1956. Today she resides in Canton, NY. Dr. Graham is not involved in engineering studies any longer, but she is still recognized nationally as a pioneer for women engineers.

**For All Students:**

Did you know what an engineer does before watching this interview?

What do you think of Lois Graham's college experience? Would you be willing to go through that type of process to get a degree you were passionate about?

How did you feel when Lois said that her friend's mother stated that she was too smart to get married? Do you think that this sort of attitude exists today? Why or why not?

Lois Graham may be the same age as your grandmothers or great-grandmothers. Does her story in any way relate to their stories? How have the stories you have heard from the women in your own family been like or unlike Lois'?

Have you ever felt that girls are pushed toward English and the arts, while boys are pushed toward math and science? How have you handled these pressures in your own life?

Did this interview with Lois Graham encourage you to consider engineering? If not, did her inspiring story encourage you to pursue a different field you hadn't previously considered?

**For Older Students (9<sup>th</sup> grade and older):**

As you consider colleges, are you looking at any that have engineering programs?

When you see statistics like those shown on the video about girls still scoring lower on the SATs in mathematics, do you think that there is something schools should be doing to decrease this gap?

When you saw how positive Lois Graham was about her engineering experiences, despite the fact that she experienced a great deal of sexism in her life, how did you feel?

Do you think we have come a long way since Lois Graham's early life experiences? Do you think we still have a long way to go?