

Abstract # J-12-1084

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Gear: FirstGear Type: Individual Length: OneHour

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Lives Improve Through Engineering

Kettering University's Bioengineering Program for High School Girls
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In 2002, Kettering University created the Lives Improve through Engineering Program in response to stagnant female enrollment, increased faculty expertise in bioengineering, and a growing body of evidence that shows young women are attracted to engineering when they see its impact on the lives of individuals. LITE's two-week residential program (open to students entering their senior year in high school), introduces smart and talented girls to the fast-growing specialty of bioengineering. Regular Kettering faculty teach courses in biomechanics, biochemistry, accident reconstruction and occupant kinematics, and ergonomics. In classes, labs, field trips, site visits, and lunchtime colloquia, participants learn about the field and its career opportunities, carry out hands-on training in bioengineering practices, and observe, first-hand, the kinds of work professionals and graduate students do to help individuals and society.

***Each summer, 36 young women (from 18 different states) have attended the LITE Program. Kettering undergraduate women mentor the participants before, during, and after their two-week on-campus experience. (The participant/mentor ratio is 3-1.) Kettering faculty interact frequently with the participants outside of class, modeling how to balance family life and professional aspirations. Alumni share their passions for engineering, while describing the often circuitous routes most of us take to achieve our goals.

The program is a success from everyone's perspective. In post-program evaluations and personal contacts, participants describe their two-week stay at Kettering as "awesome," "amazing," and "[t]he best two weeks of my life!" Most indicate they are more likely to pursue degrees in engineering after having participated in the LITE Program. Nearly one-third of the 2002 participants enrolled at the university for 2003-04. Mentors report increased confidence in their mentoring skills, greater willingness to seek out mentoring opportunities in the future, and revitalized commitments to achieving their personal goals. Faculty and alumni express significantly heightened job satisfaction and career fulfillment. ***The LITE Program is a keystone of the university's female recruitment strategy, whose goal is to increase substantially the number of women attending Kettering, and to ensure women's participation in the engineering profession.