Increasing STEM Graduation Rates

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In order to increase the number of students graduating in STEM disciplines (science, technology, engineering and mathematics), Sam Houston State University has implemented a new scholarship program aimed at academically talented but financially needy students. The PEERS program -- Peers Enhancing their Education through Research and Scholarship -- has been funded by the National Science Foundation’s S-STEM program since fall 2008, and provides scholarships as well as professional development assistance to qualified undergraduate and graduate students majoring in biology, geography, geology, mathematics or statistics.

Each year 10-12 freshmen and sophomore students receive annual awards of up to $2500, while the same number of juniors and seniors are awarded $5000. This financial support is intended to decrease the level to which our students rely on income from outside sources, such as loans (which burden so many of our students after graduation) or off-campus employment (which distract our students from excelling in their courses). All scholarships are automatically renewed in subsequent years provided certain academic standards are met.

In addition to financial support, students are encouraged to be involved in a research project with a faculty mentor. In many cases undergraduate research projects result in journal publications, travel to regional or national research conferences, and oral (or poster) presentations at meetings. The College of Arts & Sciences and the Office of Graduate Studies at SHSU has been very generous in providing travel assistance to several PEERS scholars involved in research projects.

Four of the STEM disciplines involved in the PEERS program -- biological sciences, geography, mathematics, and statistics -- offer the degree of Master of Science from SHSU. Most of the students in these graduate programs teach lower-level courses or labs as graduate assistants. Those graduate students also selected as PEERS scholars receive half of their salary from the PEERS program and half from the College of Arts & Sciences, with their teaching duties cut in half. For example, graduate students in mathematics typically teach two courses each semester in exchange for an annual salary of up to $15,000. Those graduate students accepted into the PEERS program, however, teach only one class each semester for the same salary. Therefore, these students have
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