

## **Online Learning--A Strategy to Fill Science and Engineering Gaps (Washington Times Editorial)**

The following editorial appeared in the Washington Times and was written by Susan Patrick, President and CEO of the National Council for Online Learning. Patrick's responds to an earlier article that highlighted the lack of science and engineering graduates in the U.S.

The article, "Science, technology not making the grades in U.S.," (Page 1, Nov. 17) reports on the failure of American schools to produce sufficient numbers of scientists and engineers and the view of some educators that American schools and families are not generating enough interest in those fields. This is a vitally important issue.

A major problem is that many middle and high schools — particularly in rural and poorer urban school systems — simply do not offer the rigorous math and science courses that are prerequisites for student success in science and engineering. Forty percent of our nation's high schools do not offer any Advanced Placement courses, according to the Department of Education. Government statistics also show that 52 percent of middle school and 15 percent of high school mathematics teachers do not have a major or minor in mathematics, and 40 percent of middle school and 11 percent of high school science teachers do not have a major or minor in science.

However, there is a readily available solution: online learning. Thirty-eight states have established e-learning initiatives, and most states have seen enrollments in online courses surge. The No. 1 reason cited by school districts for offering online learning opportunities is that the courses are unavailable otherwise.

Online learning is opening access and opportunity for all students by providing high-quality courses and highly qualified teachers over the Internet — regardless of the student's neighborhood or geography.

Best regards,

Susan Patrick  
President and CEO  
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