Educators are exploring how students can use GPS technologies to tackle real-world problems in science and other areas

By Katie Ash

Elementary school pupils near Rochester, N.Y., are using global positioning systems to collect and plot data on the water quality of the streams that flow into Lake Ontario.

Meanwhile, middle school students in an earth science class in Syracuse, N.Y., mash up GPS technology with topographic maps to examine geological features in their community.

And students and adults across the country are embracing geocaching, a modern-day treasure hunt made possible by GPS technology. Geocaching, experts say, has direct implications for K-12 teaching and learning.

"[GPS] is a technology that is obviously embedded in our everyday lives," says Joseph J. Kerski, the curriculum-development manager for the Redlands, Calif.-based Environmental Systems