

Meeting: 1003, Atlanta, Georgia, SS 19A, AMS Special Session on Mathematicians' Work on Mathematics Education

1003-97-265 **J. Jerry Uhl*** (juh1@ccm.math.uiuc.edu), 1409 West Green, Urbana, IL 61801. *Teaching mathematics backwards*: Preliminary report.

Several years ago, I met an engineering grad student who had completed all the courses but one needed for a master' of science at a large California university. Syanding between him and his degree was the typical engineering math course.

He had tried amny math courses only to fail. You see his brain was severely injured in an on-the-job accident. He had recovered everythingbut his ability to do arfithmetic and he had come to me to try to learn visually. I was not optimistic but then remebembered Tom West's view that math should be taught with the good stuff coming first and with heavy support from technology.

It worked! At the end of a year of hard work, this fellow was still unsure of what 3squared is, but he knows all about eigenvalues, eigenvectors,etc> He now has his degree an d is busily planning how to build things in outer space. (Received September 05, 2004)