1067-E1-830 Sandra Fillebrown* (sfillebrosju.edu), Saint Joseph's University, Department of Mathematics, 5600 City Avenue, Philadelphia, PA 19131. Making Connections in Real Analysis for Students Interested in Secondary Mathematics Education.

As in many colleges and universities, students at Saint Joseph's University that are interested in a career as secondary school mathematics teachers take the same set of mathematics classes as any mathematics major. Thus, our upper level mathematics course include future high school teachers as well as students intending to go on to graduate school. The students interested in teaching wonder why they need to take some of these courses, complaining that they will never "use this stuff" when they are teachers. We tell them that they need to see the "bigger picture" and that in order to really understand what is going on they need to take advanced courses such as Modern Algebra and Real Analysis.

However, we rarely take the time to make the connections between what they are learning in these courses and what they will be teaching in high school. This semester, in Real Analysis, I am trying to make these connections more explicit by including questions on each weekly problem set that investigate some high school topic related to what we are currently studying. This talk will present the questions from the assignments and student responses, as well as findings about whether the students interested in mathematics education found them useful. (Received September 15, 2010)