Janet Heine Barnett* (janet.barnett@csupueblo.edu). Drinking straight from the source: Learning today’s mathematics through its historical roots.

Over three decades of teaching, I have tried various strategies for engaging students in activities that will help them understand mathematics as a sense-making endeavor used by people as a means to understand the world in which they live. One of the most powerful of these strategies has been the use of primary historical sources. As instructors, we can (naturally) be tempted to give students clear and precise presentations, both in our teaching and in the written materials we provide. But just as a water filtration process intended to remove impurities can also remove healthy minerals and their interesting tastes, efforts to remove potential learning impediments can strip a subject down to a set of facts and formulas lacking in context, motivation and direction. Teaching overly distilled material is also unlikely to help students learn to develop and reason with ideas on their own. Going back to the original source from which a mathematical topic sprang is a means of restoring these vital ingredients. In this talk, I describe one approach to using primary sources with students, and share some of the exciting rewards (and challenges!) that we have experienced together as a result. (Received September 18, 2016)