Osama H Taani* (osama@nmsu.edu), 1011 Wooten Dr, Las Cruces, NM 88001. Al-Kashi's Key to Arithmetic: Its Context, Contents, and Educational Impact Up Through the Ottoman Empire. Preliminary report.

I will discuss the history of Giyath al-Din Jamshid al-Kashi's Key to Arithmetic, an encyclopedic Arabic mathematics textbook from the fifteenth century. While historical Islamic sources from the eighth to the twelfth century are rich in biographical information, especially of scientists, that is not the case for those from the fourteenth and the fifteenth century (al-Kashi's lifetime). The information about al-Kashi is scarce, scattered, and controversial. My data will come from my research into al-Kashi's own introductions to several of his books and also from some of his actual texts (such as his writings in mathematics and astronomy and his letters to his father), as well as some Arabic and English sources (I am translating parts of the Key to Arithmetic into English). I will discuss al-Kashi's life and achievement. I will also discuss the contents of the Key to Arithmetic (only small parts of which have up until now been translated into English), its historical context, and its impact on Medieval Islamic education including the Persian and Ottoman empires and Europe, from its birth up through the nineteenth century. (Received September 22, 2010)