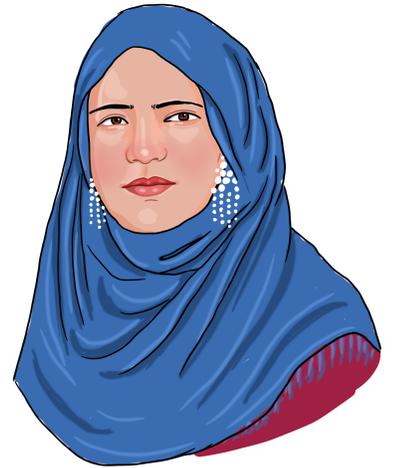


**Fatima al-Fihri**  
Rashidul Bari

Learning Objectives:

1. SWBAT learn about the founder of the world's first university.
2. SWBAT use the website to learn about Fatima al-Fihri's contributions to education in order to counter misconceptions and address stereotypes that students might harbor about the abilities of Muslim women in education
3. SWBAT discover the contributions of a community that has historically been unrecognized as a pioneer of education, from Fatima al-Fihri's narrative. Minority students will be motivated upon finding someone who looks like them in the STEM field, while other students will benefit from a more inclusive mindset of who can be a mathematics educator.



Students with double-jeopardy status, such as Muslim women, suffer from stereotypes that they are not good at mathematics (Müller & Lokhande, 2019; Inzlicht & Schmader, 2011 and Müller & Lokhande, 2019). Multicultural education can be used in the classroom to address student stereotypes of Muslim women in education (Bizahaloni, 1996; Smith & Postmes, 2011; Pretty, 2016). However, websites are more effective than Multicultural education because they incorporate learning narratives that can address stereotypes.

The story of Fatima al-Fihri, founder of the world's first university, can work against such stereotypes. Fatima was a product of the Golden Age of Islam. She was born in Tunisia in 800 AD but her father moved to Morocco for business opportunities. However, the death of her father left Fatima and her sister with a vast inheritance. Fatima used her newfound wealth to found the world's first university, which began as the Al-Qarawiyyin mosque and library and later turned to Al-Qarawiyyin university. "Many see Al-Qarawiyyin as being the perfect example of how the Muslim faith combines the spiritual with the educational", says Al Fehria of the Islamic Post.

Though not much is known about Fatima, she and her sister Maryam studied Islamic Jurisprudence and mathematics – in fact, Fatima was a student in her own university, Al-Qarawiyyin. Her contributions to mathematics education are recorded in the *Rawd al-Qirtas* (“The Garden of Pages”), the definitive history of Morocco written in Arabic in 1326 C.E by the 14th century historian Ibn Abi Zar. Indeed, this is the only historical source which records Fatima’s life and contributions. In it, Ibn Abi Zar wrote that Fatima often spent her time discussing mathematics with Maryam during the construction of Al Qarawiyyin university. This [worksheet](#) is inspired by Fatima’s quest to understand mathematics.

Fatima was also known as "Umm Al-Banayn", which means "mother of sons." -- an apt title given her kindness and caring for her students (Mohammed Yasser Hilali). Fatima always had an interest in promoting mathematics education (Bernardi, 2016), which is why she expanded the mosque area under the rule of the fifth Idrisid ruler and Sultan Yahya ibn Muhammad (Diam, P196). Fatima supervised the entire construction of Al-Qarawiyyin. In fact – she fasted for the entire period of construction of the mosque and library, which took 2 years (857-859 AD). After its expansion, students from different parts of Muslim societies gathered in this mosque to learn Islamic Jurisprudence, Fiqh, and mathematics (DW, 2020). Arabic numbers were used for the first time in European mathematics at this university. Famous people such as the historian Ibn Khaldoon graduated from the Al-Qarawiyyin University (DW, 2020).

Fatima's legacy is vast and influential: the European Union offers an annual scholarship, the Fatima Al Fihri Scholarship, for students in Algeria, Morocco, Libya, Tunisia, and Egypt. Tunisia, the country of Al-Fihri’s birth, provides an annual award, the “Fatima al-Fihri award”, dedicated to women who have significant educational attainment and who contribute to empowering other women, much as Al-Fihri did millenia ago

Learn more about Fatima Al Fihri from the following resources: [Power Point](#), [Documentary](#), [Podcast](#), [Worksheet](#), [Video tutorial](#), and [Answer Key](#) from [www.MuslimWomenMathematicians.org](http://www.MuslimWomenMathematicians.org)

### **Bibliography:**

1. Oti, Iroegbu Chinaemerem. "Meet Fatima Al-Fihri: The Founder of the World's First Library." Ventures Africa, 27 Jan. 2017, <https://venturesafrica.com/meet-fatima-al-fihri/>.
2. Ilham, T. (2020, May 8). Fatima al-Fihri: Founder of the world's oldest university. dw.com.<https://www.dw.com/en/fatima-al-fihri-founder-of-the-worlds-oldest-university/a-53371150>
3. Mortimer, R. (2018, March 8). Fatima al-Fihri: Founder of the world's first university. Manchester University Press.  
<https://manchesteruniversitypress.co.uk/blog/2018/03/08/fatima-al-fihri-founder-worlds-first-university/>
4. Qazi, M. (2022, March 28). Fatima Al-Fihri: The Woman Who Founded World's First University – OpEd. Eurasia Review.<https://www.eurasiareview.com/28032022-fatima-al-fihri-the-woman-who-founded-worlds-first-university-oped/>
5. Sabah, D. (2020, June 7). Al-Qarawiyyin, world's oldest, continually operating university, was founded by a Muslim woman. Daily Sabah.

<https://www.dailysabah.com/life/history/al-qarawiyyin-worlds-oldest-continually-operating-university-was-founded-by-a-muslim-woman>

6. Diem, Werner, and Marco Schöller. *The Living and the Dead in Islam - Studies in Arabic Epitaphs*. Volume 1: Epitaphs as Texts by Werner Diem, Volume 2: Epitaphs in Context by Marco ... Context by Marco Scholler, Volume 3: Indices. 1., Edition, Harrassowitz Verlag, 2004.
7. Lokhande, M., & Müller, T. (2019). Double jeopardy–Double remedy? The effectiveness of self-affirmation for improving doubly disadvantaged students' mathematical performance. *Journal of school psychology*, 75, 58-73.
8. Bizahaloni, L. F. (1996). *Multicultural education: Multicultural education should be an integral part of the elementary school program*. Prescott College.
9. James, G. (2002). *Advantages and disadvantages of online learning*. Retrieved July, 1, 2006.
10. Marks, R. B., Sibley, S. D., & Arbaugh, J. B. (2005). A structural equation model of predictors for effective online learning. *Journal of management education*, 29(4), 531-563.
11. "The Al-Qarawiyyin Mosque." Morocco.Com, <https://www.morocco.com/blog/the-al-qarawiyyin-mosque/>. Accessed 11 Dec. 2022.
12. Post, The Islamic. "Greet Fatima Al-Fihri: Lady of Fez and Founder of Al-Qarawiyyin - The Islamic Post | Online Edition." <https://www.islamicpostonline.com/>, [https://www.islamicpostonline.com/magazine/2013/06/23/greet\\_fatima\\_al\\_fihri\\_lady\\_fez\\_and\\_founder\\_al\\_qarawiyyin-561/](https://www.islamicpostonline.com/magazine/2013/06/23/greet_fatima_al_fihri_lady_fez_and_founder_al_qarawiyyin-561/). Accessed 24 Dec. 2022.