## **Hayat Sindi** Rashidul Bari

## Learning Objectives:

- 1. SWBAT learn about Hayat Sindi, the first Muslim Woman leading voice in STEM.
- 2. SWBAT understand that education is the best tool to break the barriers by learning the story of Hayat Sindi
- 3. 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 mathematician



Hayat Sindi was born in Saudi Arabia--the birthplace of Islamic Prophet Muhammad. He founded Islam on August 10, 610 AD which many consider as an educational event because angel Gabriel asked Muhammad to say 'Ikra" meaning Read. Why then it took more than 1400 years for a Muslim woman to earn a Ph.D from Saudi Arabia?

Hayat Sindi studied at MIT and Harvard University. She earned her Ph.D from Cambridge University, becoming the first woman from Saudi Arabia to receive a doctoral degree. This was one of the first ways that she started to break down barriers for women. Saudi Arabia was the first country in the world that put emphasis on women education but became the last country in the world to repeal its ban on women drivers. One of the reasons I choose "Muslim Women Contributions in Mathematics" as the topic of my dissertation, is that I believe we can break the barriers for women in the Muslim countries by showcasing narratives of accomplished Muslim women like Hayat Sindi and reminding 2.2 billion Muslims (23 % of world's population) especially those who have mindset like Talibans that birth of Islam in itself was an educational event. A few months ago, Brooklyn Tech implemented my idea and this is how I discovered it: It was Sep 8, 2022. It was the first day of school.

I arrived at school early and went directly to the auditorium to hear the principal 's remark which can be summarized in a few sentance: We need to do everything we possibly can to create a community inside our classroom. And the first step toward accomplishing this goal is by turning our classroom into a multicultural museum. I will give you a set of posters from accomplished women from different cultures to place them into your classroom".

When I went to pick up the posters, I was amazed. I saw hundreds of posters of a Muslim women with hijab. I immediately checked the name, Dr. Hayat Sindi. I searched her name and I read that she is Saudi Arabia's first woman with a Phd in STEM. I brought the poster to the classroom and proudly hung it on the wall.

Hayat Sindi was born on Nov 6, 1967 in Mecca, where Prophet Muhammad was born in 570 AD. As a young girl growing up in the holiest place in Islam she dreamed of studying at King's College in the United Kingdom. She accomplished her goal in 1995 by graduating from King's College in Pharmacology with Princess Anne's Award for her contribution in allergy. As a young student growing up in Mecca, she used to dream of studying at the same university where Sir Isaac Newton attended as a student and taught as a professor. In 2001, she accomplished her dream by earning Ph.D in biotechnology and became the first woman from any of the Arab States of Persian Gulf to earn a Ph.D. Dr. Sindi is one of the world's leading biotechnologists, who invented a biochemical sensor that features thermoelastic along with Magnetic Acoustic Resonance Sensor, currently teaching at Harvard University.

## Bibliography:

- Explorer Profile: Hayat Sindi, Biotechnologist | National Geographic Society. https://education.nationalgeographic.org/resource/explorer-profile-hayat-sindi-biotechnologist. Accessed 5 Dec. 2022.
- 2. "Hayat Sindi." World Economic Forum, https://www.weforum.org/people/hayat-sindi/.
  Accessed 5 Dec. 2022.
- 3. Ms. Hayat Sindi | Department of Economic and Social Affairs. https://sdgs.un.org/panelists/ms-hayat-sindi-29643. Accessed 5 Dec. 2022.

 Maher, Ahmed. "Saudi Scientist Hayat Sindi on Making Arab Women More Visible in Science." The National, 11 Feb. 2022, https://www.thenationalnews.com/gulf-news/2022/02/11/saudi-scientist-hayat-sindi-on-making-arab-women-more-visible-in-science/.

"Dr. Hayat Sindi." Global Thinkers Forum,
 https://www.globalthinkersforum.org/people/dr-hayat-sindi. Accessed 5 Dec. 2022.