कल्पना - Kalpana

FANTASY. IMAGINATION.

By Sareet Nayak

Kalpana Chawla

BACKGROUND

- Kalpana Chawla always had a fascination for planes and flying. Her teachers recount that she often spent her free time modeling planes and flying them.
- Chawla was born in Haryana, India, but later immigrated to the United States (First Generation Asian American) to pursue a Masters in Aerospace Engineering at the University of Texas at Arlington and a Ph.D. in Aerospace Engineering at the University of Colorado, Boulder.
- Her notwithstanding dreams landed her a job at the NASA Ames Research Center in 1988, where she studied Computational Fluid Dynamics for airplane landing.
- In 1991, Chawla was invited to the NASA Astronaut Corps, making her a candidate for NASA's space missions.
- Her dream of flying materialized in 1997 when she flew her first space mission, Flight STS-87, aboard the Columbia Space Shuttle. This journey made her the first Indian woman to go to space. When asked what it feels like to be the first Indian woman in space, she remarkably responded, "If you want to do something, what does it matter where you are ranked?"
- Chawla did what she loved through life and death. She died during her second space mission, Flight STS-107 aboard the Columbia Space Shuttle, known as the "Challenger Disaster."

"[KALPANA CHAWLA] HAS DEMONSTRATED WHAT YOUTH CAN ACHIEVE, WHAT WOMEN ARE CAPABLE OF, WHAT EACH AND EVERY ONE OF US CAN ATTAIN WITH DETERMINATION AND DEDICATION. HER EXAMPLE WILL INSPIRE THE YOUNG TO BELIEVE IN THEMSELVES AND SET UP SUCH HIGH GOALS, IRRESPECTIVE OF WHETHER THE CHILD IS A BOY OR A GIRL. NEXT GENERATION MUST CARRY KALPANA CHAWLA'S TORCH, THE TORCH FOR THE QUEST OF KNOWLEDGE HANDED OVER TO THEM." —BANARASI LAL CHAWLA

BREAKING THE BAMBOO CEILING

CLASS CONTEXT

- Enforced by the Model Minority Myth, the achievements of Asian Americans in STEM are overlooked because society attributes race alone to the success of Asian Americans.
- Despite being described as the all-around Model Minority, Asian Americans (especially women) experience increased difficulty in professional mobility based on preconceived notions of leadership and communication.

CHAWLA'S INVOLVEMENT

- Chawla recalls being discouraged by flight owners and peers, but her challenges never dimmed her spirit.
- By breaking the glass/bamboo ceiling faced by Asian American women, Chawla has paved the way for many others to do the same. Additionally, she sponsored numerous Indian and Indian American women to attend NASA's Summer Space Experience Program and the International Space Education's United Space School.

AAPI IMPORTANCE

- In a "Journal of Women and Minorities in Science and Engineering" the authors report that Women of Color (WOC) identify less with STEM Living and Learning Programs and Careers because WOC experience less exposure to peers and representation within the field.
- To engage WOC in STEM, it is essential that we actively promote inclusivity and diversity in STEM and empower WOC in STEM. Stories like that of Kalpana Chawla should become commonplace.

PROMOTING BICULTURATION

CLASS CONTEXT

- Biculturation is an integration of assimilating with one's mainstream culture (acculturation) and maintaining aspects of one's heritage culture (enculturation).
- Biculturation reduces acculturative stress, which promotes psychological adjustment and social-cognitive development.
- Socialization (promoted by family and close friends) and internalization of one's family and close friends' bicultural beliefs are the catalyst to an individual's biculturalism.

CHAWLA'S INVOLVEMENT

- Chawla was met with disapproval from Indian society for her dreams. Inevitably, when she moved to the US, she did not look back, but never abandoned her Indian roots either.
- She invited students to her home to provide mentoring and home-cooked Indian dinners, an embodiment of her bicultural existence.
- Chawla has inspired many Indian Americans, like myself, who often face internal conflicts as "American Born Confused Desis"

AAPI IMPORTANCE

- In the "Bicultural Socialization: Factors Affecting the Minority Experience," the author describes that an essential socializing agent is the presence of individuals who model bicultural normative behaviors to same ethnicity observers who will inevitably seek these behaviors.
- To promote bicultural socialization, it's important that Asian American public figures actively reinforce and model bicultural behaviors, as Kalpana Chawla did.

CITATIONS

WEBSITES

- Khurana, S. (2019, July 09). Inspiring story of DR.KALPANA CHAWLA. Retrieved April 26, 2021, from https://medium.com/@sukantikhurana/inspiring-story-of-dr-kalpana-chawla-d205ca6f5d77
- Wakeman, A. (2000, February 02). Astronaut never took 'no' for an answer. Retrieved April 26, 2021, from https://www.nytimes.com/2000/02/02/international/asia/astronaut-never-took-no-for-an-answer.html
- 20 Asian American and Pacific ISLANDER women to know. (2020, June 22). Retrieved April 26, 2021, from https://www.yoracampus.org/kit-our-voices-blog/20-asian-american-and-pacific-islander-women-to-know/
- Astronaut bio: Kalpana Chawla 2/03. (n.d.). Retrieved April 26, 2021, from https://history.nasa.gov/columbia/Travel/Columbia%20Web%20Site/Biographies/Crew%20Profiles%20Information/Crew%20Biographies/42590k-t.HTM
- Kalpana Chawla. (2021, April 20). Retrieved April 26, 2021, from https://en.wikipedia.org/wiki/Kalpana_Chawla
- Inspiring quotes by KALPANA Chawla, the woman who boxed to fly. (2019, February 01). Retrieved April 26, 2021, from http://www.theportrayalofwholefoundation.org/blog/inspiration/inspiring-quotes-by-kalpana-chawla-the-woman-who-boxed-to-fly/
- Bodd, N. (2017, December 21). Kalpana Chawla: Biography & Columbia disaster. Retrieved April 26, 2021, from https://www.space.com/17098-kalpana-chawla-biography.html
- Chawla, Kalpana (1962-2003). (n.d.). Retrieved April 26, 2021, from https://www.tshaonline.org/handbook/entries/chawla-kalpana

PEER-REVIEWED ARTICLES

- De Anda, D. (1984). Bicultural Socialization: Factors Affecting the Minority Experience. Social Work, 29(2), 101-107. Retrieved April 26, 2021, from http://www.jstor.org/stable/23714422
- Johnson, D. R. (2011). Examining sense of belonging and campus racial diversity experiences among women of color in stem-focused mentoring programs. Journal of Women and Minorities in Science and Engineering, 17(3), 209-222. doi:10.1615/womenminorsciengen.2011002242