

AVANZA

ADVANCEMENT THROUGH EDUCATION



DO NOT GO WHERE THE
PATH MAY LEAD, GO
INSTEAD WHERE THERE
IS NO PATH AND LEAVE
A TRAIL.

—
RALPH WALDO EMMERSON



FOREWORD

Humanity is connected by experiences: successes, failures, laughter, sorrow, compassion, love, and challenges. This collection of true stories focuses on Mexican-Americans who may have encountered seemingly insurmountable circumstances growing up but dared to dream and overcome these obstacles. The people in these stories all come from blue collar backgrounds, and while it may have seemed that another life wasn't possible when they were younger, they all landed at the Massachusetts Institute of Technology (MIT), eventually becoming doctors, engineers, entrepreneurs, scientists, and more.

In this book, one will see the power of an education, view a cross-section of the underserved population as seen through the eyes of these successful Mexican-Americans, and realize that no matter the group, many of us share common experiences. The key point of this book is that if one is prepared to work hard, imagine a better future, and go after it with vision, creativity, and perseverance, then wonderful things become possible.

With this, we leave you to explore these stories and imagine what you can be.

Enjoy!

Avanza Network - www.avanzanetwork.org

NEYDA
GUTIERREZ



TODAY

I currently work for the Air Force managing Environmental Remediation Programs, Oil and Petroleum Storage Tank Repair, and Construction Projects. My projects have taken me all over Europe and the Middle East, and I have thoroughly enjoyed the variety in my work.

I managed to graduate in four years from MIT in 1991 with a degree in Materials Science. Thereafter, I headed back home to Texas and found a job in an environmental engineering design firm. I promptly went back to school and obtained a Master's degree in Civil Engineering from the University of Texas at El Paso. I have been working in the civil/environmental and construction fields since.

In 1998, I moved to San Antonio, and I married not long after that. In San Antonio, I soon began working with Bausch and Lomb running the plating line for Ray-Ban sunglasses. That was the closest I got to using my Materials Science degree

PERSONAL STORY AND PATH TO COLLEGE

I attended Mt. Carmel Elementary, a private Catholic School that (I later found out) allowed my siblings and me to attend as a charity case, charging my mother a minimal tuition for all three of us. I did not know English at the inception of my schooling. It's odd to me, but one of my earliest memories is that of my mother telling me that it was time for me to go to school and asking me if I wanted to attend kindergarten or first grade. I must have chosen first grade, because that is where I ended up without knowing any English. I was five, about to turn six, and was then demoted to kindergarten. I remember trying hard to learn English and attempting to communicate with the other kids. It didn't take me long, however, and by the end of the year, I was on my way and near the top of the class.

As a high school senior, I really had no idea what being an engineer involved. What I knew is that I liked science, was good at math, and dreamed about being an astronaut. As to how to go about it, I was clueless. When friends, teachers, and counselors recommended engineering for me, I just went along with it.



The decision to go to MIT came as a consequence of a visit by fellow El Pasoan and Jefferson High School graduate, Eddie Grado. I really only had a cursory knowledge of MIT, but after Eddie's visit, I began looking into it. Around the same time, NBC news had a feature on MIT and all the work they were doing for the space program, and that sealed the decision for me. When I got that yellow envelope in the mail, it was such a relief, and such excitement! My mom happened to be at home when I received the letter that afternoon, and I had to explain to her that I had gotten into my school of choice!

FAMILY

I come from an immigrant family in El Paso, TX. I spent my young childhood splitting time between Juarez and El Paso, like many in the border Area. My mother is a domestic worker, and she alone raised me and my two brothers (I was the middle child), along with some of her younger siblings. My father was around in my early childhood but was mostly absent until he eventually disappeared from our lives.

My mother came from a small town in Zacatecas, Mexico and attended school up to third grade. When she was eleven or twelve, she was sent to Mexico City to work as a domestic worker on her own, and at the age of sixteen, she ended up in Juarez/El Paso working as a domestic worker. Growing up with a single mother was stressful, but the one significant trait of my mother was pure and unquestionable grit; and that, combined with resourcefulness is what got us through. (To this day, I still wash my Ziploc bags!)

COMMUNITY

I never really encountered discouragement from my teachers or counselors. For my little high school next to the Rio Grande, we were big thinkers. Most of the honor students were applying all over the country and to Ivy League Schools. We were the little school that could.

I had seen this as a possibility a couple of years earlier, as my older brother graduated with Fernie Azcarate, the valedictorian from that year who received thousands upon thousands of dollars in scholarship offers from all these amazing institutions!

I was the first in my family to attend college, and I was going so far away. But I did not hesitate for one moment to leave El Paso. I was ready to spread my wings and fly!

COLLEGE EXPERIENCE

The adjustment to the workload at MIT was not easy. In fact, it was very difficult. I wasn't prepared for the rigors of MIT. The pace of the courses was outrageous, and I was suffering from an inferiority complex. I was used to not having to study very much in high school, always cramming at the last minute and making it work. I soon found out it didn't work at MIT.

Right away, I noticed that other students were much better prepared, many having taken college courses and having placed out of calculus. Self-doubt and fear of failure had set in. In the end, I realized that I was taking too heavy a load, having to drop classes, thus affecting the performance in all my classes. I persevered, however, and in the times when I wanted to give up, I knew failure was not an option. So I pressed on.

In tough times I thought of my mother, and a poem that had resonated with me in high school, "The Courage that My Mother Had" by Edna St. Vincent Millay. That poem conjured for me the grit and toughness my mother has. Grit is what got me through. Now, I realize that I did have this courage all along, but I should have asked more questions and taken advantage of all the tutoring programs at MIT. That would have made my time at this institute so much easier.





REFLECTION AND MESSAGE

Through so many years of my career, the one big lesson that has been the hardest to learn for me is the importance of relationships and communication in business. Communicating well and “who you know” are more important, in my opinion, than how much you know. Being shy and quiet is a detriment, and that is the hardest lesson I have had to learn. If I had it to do all over again, I would have stayed another year and pursued the management program at MIT. I would recommend to any student going into engineering to take a healthy dose of management and communication courses in order to be better prepared to meet the challenges of the business world.

For now, I continue to work for the Air Force and am still learning as I go. I will continue evolving and will keep on improving myself for as long as I can, because I do not want to remain stagnant. My hope is to travel a lot more in the future, and to contribute in any way I can in the education of future generations.

Lastly, this poem has special meaning to me, and I would like to dedicate it in honor of my beautiful mother:

The courage that my mother had
Went with her and is with her still:
Rock from New England quarried:
Now granite in a granite hill.
The golden brooch my mother wore
She left behind for me to wear:
I have no thing I treasure more:
Yes, it is something I could spare.
Oh, if instead she'd left to me
The thing she took into the grave!-
That courage like a rock, which she
Has no more need of, and I have.

— *Edna St. Vincent Millay (1892-1950)*