

FINANCIAL AID: HELP OR HINDRANCE?



Mariana Sierra, project manager, Gas Transmission, Pacific Gas and Electric Company



A college education is one of the major purchases you will make over a lifetime. But like cars and houses, the “business of university” comes with so many loan products and grant services it’s easy to get overwhelmed. *Hispanic Engineer & Information Technology* magazine (HE&IT) magazine asked the opinions of students, financial aid professionals, and STEM executives to get insights on everything from student borrowing to debt and financial aid programs.

Seven years ago, a Washington, D.C.-based public policy and advocacy organization found that nearly half of all student borrowers carried an average balance of \$3,176 in credit card debt, and 58 percent of Hispanic college students are graduating with unmanageable debt. To raise awareness throughout college campuses and communities, the National Puerto Rican Coalition traveled across the United States and Puerto Rico coordinating various workshops to address the importance of credit building and financial literacy.

The first mistake that many students and families make is assuming they can’t afford to pay after looking at the sticker price of colleges or universities, said **Erin Timmons**, managing editor at the National Association of Student Financial Aid Administrators (NAFSAA). According to Timmons, author of “University Business: Less Debt, Easier Payback,” financial aid can significantly reduce costs.

But going by recent headlines that over 70 percent of undergraduates in 2012 left school with a diploma and debt, to the

tune of nearly \$30,000 per person, and that student loan debt is totaling \$1.2 trillion—surpassing both credit card and auto loan debt in size, it’s hard to see just how much of a reduction financial aid can make. In a recent interview with Inc.com, Mark Cuban, “shark” investor on the television series *Shark Tank* and owner of the NBA’s Dallas Mavericks, observed that colleges allow students/potential students to borrow more and more money for tuition because it’s guaranteed by Sallie Mae and the government.

The flip side, Timmons noted, is that the way to avoid taking out loans is to start research early. Colleges and universities offer what they think students might need, but students are not obligated to take the full amount offered, she said.

“There’s so much spiraling around in the media about out-of-control loan debt, and amounts that students are having trouble paying back,” Timmons said. “But NAFSAA wants to



Erin Timmons, managing editor, National Association of Student Financial Aid Administrators

remind students that there are scholarship and grant resources out there and if students start their research early to find financial aid they will probably defray some of their loans.”

START EARLY. GET INFORMED.

A big proponent of financial literacy, NAFSAA, which serves nine out of 10 undergraduates in the United States and represents nearly 20,000 financial aid professionals at 3,000 colleges, universities, and career schools across the country, advises the first step should be finding out ways to pay.

NAFSAA’s toolkit has resources that can help, Timmons said. The “Students, Parents and Counselors” section on the website has an overview of financial aid—what it is and the difference between merit-based aid vs. needs-based aid—which is important for students to understand. Merit based aid is given to students who do exceptionally well in academics, music, athletics, or plan to have a career in an area that benefits the community or in career fields such as science, math or engineering. Needs-based aid is given to students who demonstrate a lack of financial resources to pay for college.

Knowing the difference starts with the Free Application for Federal Student Aid or FAFSA, Timmons said. “With that one application you can apply for financial aid at multiple colleges and multiple funding sources: federal, state, institutional and private providers.”

But until a bill passes to simplify the 108-question FAFSA, which has been described as intimidating and time-consuming by some U.S. senators, Timmons advises students to use the checklist backed with tips on NAFSAA’s website to limit delays and apply for financial aid every year.

“It helps because if there’s been a change in your circumstances—one of your parents has lost their job or illness has created new medical expenses going into your sophomore year—a new FAFSA form allows financial administrators to recalculate the amount they think you can reasonably claim.”

THE MOST IMPORTANT AID IS SCHOLARSHIPS

Through FAFSA, **Dong-Nghi (Donny) Hua**, a Lockheed Martin Mission Systems and Training (MST) software engineering professional, was able to obtain more grants and loans. “Since this covered less than half of what I needed, I also applied for engineering scholarships through my university,” Hua explained.

Timmons added that it’s important for students to know that those colleges



Dong-Nghi (Donny) Hua, software engineer, Lockheed Martin Mission Systems and Training

and universities which meet full needs are committed to ensuring students have the full amount of money to attend. However, at schools that are unable to meet full needs, students should do research to see what types of merit-based or needs based scholarships are available outside the university.

“The most important financial aid for me was scholarships,” said **Pranay Tewari**, a senior at Arizona State University majoring in finance and a 2014 DHL Global Forwarding’s intern in Tempe, Arizona. “There are many different scholarships offered in universities and students should apply for them,” he advised. “Scholarships have different requirements that need to be met but I used to treat those as goals I need to achieve each year.”



Pranay Tewari, senior, Arizona State University

YOU CAN NEVER HAVE TOO MANY SCHOLARSHIPS

Mariana Sierra, a project manager in gas transmission at the Pacific Gas and Electric Company since graduating from the University of California Berkeley in 2004, applied for every scholarship and financial aid she could from the Bay Area in northern California to nationwide bodies such as the Hispanic Scholarship Fund.

“Our scholarship awards range from \$500 up to \$5,000,” said **Vikki Gutierrez**, director of marketing and communications for the Hispanic Scholarship Fund (HSF).

The HSF awards over 150 types of scholarships and has administered \$430 million in scholarships since the organization was founded in 1975.

“We are also one of the administrators of the Gates Millennium Scholars program to the Latino population, which can pay for all four years and give a full ride all the way to Ph.D.”



Vikki Gutierrez, director of marketing and communications, Hispanic Scholarship Fund

Graduate Fellow **Meline Baghdasarian** is attached to the Center for Energy and Sustainability in the department of mechanical engineering at California State University, Los Angeles.

“My first scholarship was from the Boeing Company, and I was a NACME (National Action Council for Minorities in Engineering) scholar for several years,” she recalled. “Financial aid covered almost all my tuition when I was an undergraduate. When I got to graduate school, I received a fellowship from the Center for Energy and Sustainability funded by the National Science Foundation. This center fully funded my master’s degree. I also worked part time starting my sophomore year at school and then got a paid internship the following two summers.”



Meline Baghdasarian, California State University, Los Angeles

Twenty-something, Cuban-born **Maria R. Martinez**, who came to the United States in 2009 as a high school senior, recently graduated with a bachelor’s degree in civil engineering from Florida International University.

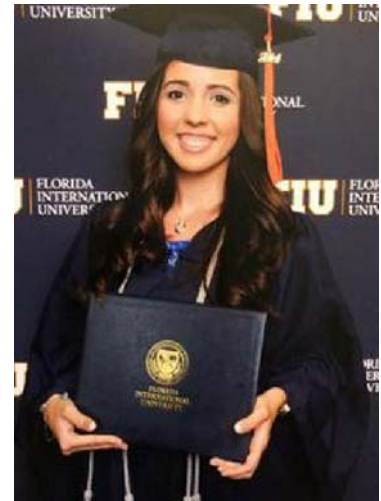
“I financed my entire career through scholarships, fellowships and grants,” Maria said. “During my undergrad, I obtained the Ronald McDonald Scholarship, Bank of America Scholarship, Jorge Mas Canosa Scholarship, Florida Structure Engineering Chapter Scholarship, American Association of Civil Engineers Scholarship, and Cuban American Association of Civil Engineers Scholarship, among others,” she said.

Norma Manzanarez, currently a chemical engineering student at Lamar University and summer intern at Bayer Material Science in Baytown, Texas, also took the initiative and applied for scholarships.

“There are many available,” she said. “Sometimes it is just a matter of searching for them and applying. It takes some time filling out applications, but it is worth it.”

In 2006, Stanford established a \$10 million financial aid program for Latin American students. The Alejandro and Lida Zaffaroni Scholarship and Fellowship Program was partly funded by gifts from a group of more than 35 associates who credited Zaffaroni with providing inspiration, mentorship and friendship during the course of their careers. Zaffaroni, an innovator in biotechnology and drug delivery systems, and generous humanitarian with close ties to Stanford, died March 1 at age 91. His deepest personal satisfaction came from finding new ways to apply the findings of science to the treatment of disease and the prevention of human suffering.

And if you have to take a break from your studies to work full-time, this can be a learning experience too. Norma attended the University of Houston (1998-2004) as a chemical engineering student and completed three co-ops at Dow Chemical. Then she took a break to work and save money to finish her education. She says that the time in industry taught her new skills and was very valuable.



Maria R. Martinez, Florida State University

YOU CAN NEVER HAVE TOO MANY INTERNSHIPS

As a freshman, Maria was a tutor in the Florida International University Student Support Service Office. During her sophomore year, while going to school full-time, she worked as a learning assistant in the Algebra Lab. She completed an engineering internship which opened doors to conduct research as a Ronald E. McNair fellow in the Titan America Structures and Construction Testing Laboratory under College of Engineering and Computing Dean Amir Mirmiran, who Maria says has been a mentor and a driving force in her success.

Maria continued working with the structural design team while undertaking internships including one with the Florida Department of Transportation, earning a coveted NACME Fellowship, a Florida-Georgia Louis Stokes Alliance for Minority Participation scholarship (FGLSAMP), and making the Dean’s list. FGLSAMP, a National Science Foundation Project, includes over 500 talented undergraduates in Science, Technology, Engineering, and Mathematics (STEM) majors.

Upon graduation, Maria plans to pursue a master’s in structural engineering at Stanford University, where she earned a fellowship and scholarship that will cover her tuition and living expenses.

