

“How I Got Here: Heriberto—Educator-focused Video”

Lucy: Hey, I'm Lucy, and today we're going to look at how to prepare to go to college through the eyes of Heriberto, a real life transformer; but, more on that in a bit.

I got to say, if I had it to do all over again, there are two things I'd do differently in prepping for college. First, I would've taken more towels. Four wasn't enough for my first year. I won't bore you with the details, but let's just say that drying yourself with a hand towel takes longer than you might think.

Second, and most important, I would've taken AP classes. These advanced courses are a fantastic way for your students to get ready for college. The benefits to taking these classes are essentially three-fold. One, since AP classes are at the college level, students will get a glimpse of the rigor of college and what to really expect once they arrive on the campus of their choice. Okay, that's rather awesome. Two, completing AP courses is a great way to make an impression on scholarship committees. Having college credit on your scholarship application is a way to stand out from the crowd, and the scholarship decision makers will appreciate students who are already making an effort towards completing their degree. Three, AP classes can save your students money. By completing courses and passing the tests prior to enrollment, incoming students can skip classes they've already taken at little or no cost. In fact, this head start could even lead to an early college graduation. Nice, right?

Of course, it's important to keep in mind that there is a difference between dual credit classes and AP classes. Sometimes we just lump them together because we categorize both in our minds as ways for students to get ahead in college. However, if we take a closer look, AP courses are a much more efficient and cheaper option for students trying to earn college credit.

For a quick comparison between the two, check out this side by side chart. AP classes are free for high school students, whereas, dual credit classes can require students to pay money to the college working with a high school teacher who's considered adjunct faculty. AP classes require pre-AP or honors classes as a prerequisite. Dual credit classes don't need a prerequisite, but students must pass a college entrance exam and meet the requirements for enrollment to the college offering the course. Lastly, students must pass the AP exam to earn college credits. Colleges will determine the number of credits earned based on the student's score. With dual credit classes, students must pass the course to earn credit. This final grade will reflect on all college transcripts. Yep, that's pretty permanent.

Now, as you watch the story of Heriberto, pay attention to how he prepared for college. He identified his passion at an early age, stayed focused on his goal, and took AP classes to get to his goal faster.

Now, what does this button do? Um, Heriberto?

Heriberto: My name is Heriberto, and I'm from Brownsville, and I run a robotics company. Robots are my life. When I was a child, I began playing with Legos, and I would build boats, cars, airplanes.

Lucy: I'm back. Hope you're really soaking up Heriberto's story. Let's take a closer look at some of the most important points, and make sure all the pieces fit. Here's a simple truth. College is expensive. You've got tuition, books, room and board, not to mention that killer new black light poster for the dorm room. All of that can add up pretty fast. Students can save the equivalent of one semester's tuition, just by taking AP courses and earning credits after taking their exam. That can mean up to \$25,000 back in your student's pocket, depending on which school they attend. Seriously, 25 grand. That was the entire year's salary for President Thomas Jefferson. If you took AP History, you'd know that this is not Thomas Jefferson. It's John Adams. This is Thomas Jefferson.

Another great reason to take AP courses before heading to college, is the difference in class size. A typical high school class has one teacher and about 20 to 30 students. A typical freshman basic course at a major university can have up to 500 students. The opportunity for one on one interaction with your teachers, might be a little hard to come by.

Finally, one of the best reasons for taking AP classes, is that you could actually graduate a whole semester early. Think what students could do with that extra semester. Apply for jobs, journey around the world in a hot air balloon, or maybe even intern as a rocket scientist like Heriberto.

Heriberto: At the age of 14, I built my first robot from scratch. When I first flipped on the switch and it came to life, I was hooked on robotics. I had no idea I'd be pursuing robotics as a career. I was a [inaudible 00:05:26] student back in high school and it was all about preparing and getting into college. What helped me the most was I took AP courses while in high school. Calculus, English, History, Spanish. These AP courses gave me an insight into the college life and the rigorous curriculum that college courses require. I wanted that challenge, I wanted to advance my studies, and the Advanced Placement courses I took definitely helped me prepare for college. Scholarship committees are looking for students that are taking these AP courses. Because I took these courses while in high school, I was able to skip these course in college and save a lot of money in the process. They can even help you graduate college early.

I went to University of Texas at Brownsville and I graduated with a Bachelor's in Computer Science. From there, I went to an internship at NASA to develop software for the next mission to Mars. Then I came back to the valley to kick-start my own robotics company called Reybotics. We developed six-legged robots, four-legged robots, robotic arms. The robotic arm can pick up small objects. You can do this number here. We developed educational based robotics kits for middle schools and high schools across the nation. My robotics helped teach concepts in physics for students who don't have a way into robotics. When you ask, "So what do you do for fun?" It's like, "This is fun."

I also work on medical robots. In the future, we're going to have very large robotic arms doing surgery on humans. We need to practice on these robots instead of practicing on real humans. Robotics is not just toys. You can develop exoskeletons for the military. You can develop drones that can do surveillance. Everything you see around you is produced by robots, some way or another. Thanks.

In order for me to pursue my passion for robotics, I knew that college was key. Taking these AP courses were also key. These AP courses might seem scary, it might seem dumb to you, but focus on the end goal. Your passion, your interests, what career you want to pursue. I always say, "Dream big, start small." As it turns out, I began playing with Legos and I had no idea I would be starting up my own robotics company.

Speaker 1: It's absolutely possible for students to achieve things beyond their wildest imagination. The key is to help them identify their passions and interests, work hard, and keep their eye on the prize, just like Heriberto. His incredible work ethic eventually landed him an internship with NASA, which is a big deal. They don't just pass those out left and right. I should know. I got sent home from space camp when I was 11 for eating too much astronaut ice cream. It's just so good.

By taking AP courses in high school, Heriberto got a head start on his core basics, stayed on schedule, and graduated college in time to participate in an internship that would eventually lead to his full time business. Heriberto also made the choice to use his passion for robotics to give back to others. He hopes to inspire a whole new generation of mechanical engineers and innovators. Talk to your students about what inspires them and how they might be able to use that inspiration to give back after college. After all, it doesn't take a rocket scientist to see the value of taking AP courses in high school. Okay, well that's not the best example, but you get the idea.