NARRATOR:

Allen University is celebrating the success of students enrolled in its STEM program, STEM standing for science, technology, engineering, and math. This historically black school located in Columbia was founded the 1870s, is affiliated with the AME Church, and has about 600 students. Many of these students are graduating with degrees in the sciences or technology. And their securing enrollment in medical school, dental school, or getting jobs working in laboratories, in their areas of interest. How are they doing it?

- What we're doing differently here at Allen University to prepare them for the workforce is smaller classrooms, where we can actually stop if they don't understand something, go back and explain things. Also, using a lot of visual aids. So I do it for my A&P class, I have PowerPoint slides, I write on the dry erase board, but I also have miniature models that I purchased where they can actually have hands on, at their own lab table, of the things that we're actually discussing in class.

Little movement with the clavicle, right?

I like using technology because it allows me to do things that a regular blackboard can't do. I can put pictures on the board that
I couldn't do normally. I can use the same notes that a different professor has used so that we can stay on the same page,
teach things the same way, use the same sort of examples.

- That line is just py axis, it's another one of those axis boundaries with the [INAUDIBLE], right?

NARRATOR:

Dr. Michael Lane uses a program called the flipped classroom.

- The flipped classroom is where the students outside of class are watching the video that would normally be taught inside the classroom. So they learn the material outside of class and then inside the classroom, they get to apply their learning, and practice the problems, and it helps them to learn the material with the teacher's help through example, rather than through sitting in a lecture. And it also allows for extra class time for them to be able to practice more with the teacher rather than just going back into their rooms and trying the problems on their own. I really do believe it is helping them to do well in the course and to learn things more effectively.

- I'm going to manage this more affordably.

NARRATOR:

When it comes to the environment, Dr. Tomohiro Kawaguchi encourages his biology students to use what they learn outside of the classroom with a program called Lab Quest.

I'm teaching students how to use this state of art device called Lab Quest to monitor water temperature, water conductivity, pH. Not only that, we ask students to go outside of the classroom to monitor the stream they are interested in. And then they can actually participate, volunteer monitoring programs. So the student learns the knowledge in the classroom, but at the same time, they are actually participating, as our next work force, to monitor the water quality. So by doing so, they are actually doing the learning as well as an internship at the same time.

- Now, I want to give you [INAUDIBLE].

NARRATOR:

Dr. Olumole Arivo teaches molecular biology. He stresses the importance of practical activity.

- I find out at the very best way to really engage students is to

bring in answered activities into the class that relates to the topic that is actually being taught in the class. So that way, it sticks better with them. Eventually, they develop interest, that [INAUDIBLE] to want to go into such a profession. I feel fulfilled as a professor. I don't think I could be in any other place that would be better satisfying to me because I believe, in life, that if you're able to to reach just one person, then you're making an impact.

- Now, we want to preach the results, right?

NARRATOR:

Mr. Abdollah Rabieh is another instructor in Allen University's science and technology program who believes in the magic of hands on projects and internships.

- In the classroom, we try to use hands on projects. Divide the class by half, half to go explain the subject. And then half of the class, I'm going to give them assignment to do it in the computers. And there is one important thing. We have an internship program that is in the evening and summertime with our summer camp. So the student becomes eligible to participate in the project activity.

NARRATOR:

One of those students is Demetrius Johnson, who transferred to Allen, went through their computer summer camp, and now works in Allen's Information Technology Department.

- The first semester I came here, Rabieh was already trying to get me with the IT department. And I told him I wasn't confident that I had the info or the knowledge to apply. He was like, don't worry about it, we'll teach you. You can start at zero. And you walk. And then you run. And he got me in IT over the summer. I learned everything. I went from zero to 100, literally. And everything I learned over the summer, apparently, they liked me, and they hired me again for the semester.

My experience at Allen university has been great because of small class sizes, the teachers like Mr. Rabieh, Dr. Lane, Dr. Bubas, they're really there for you. They really help you.

- The professors here are very helpful, actually. They motivate me every day, even when I want to give up. I am very happy I came here.

NARRATOR:

News like this makes Allen University president, Dr. Ernest McNeely, proud.

- Well, I think students are receiving a great deal of personal attention that continually allows them to achieve their maximum potential. We have very dedicated faculty in the STEM disciplines. And they provide the kinds of inspiration and instruction that has been very important in our students moving on to graduate school, to medical school, and to a number of highly paid positions in technology. The focus is really on ensuring that students have the skills necessary, the intellectual skills, the human skills, to succeed at whatever it is they ultimately decide to do.