intimidating cultural and language barriers and can help
students understand and navigate the complexities of a topic on a global level was rewarding. According to Laura
Mendryga, a pre-nursing student, one of 26 students from various program disciplines who traveled to Brazil for
the leadership of Irv P. Jones. WCCCD students are becoming
proficient in Sustainable Buildings and Sites Technology that equips Water and Wastewater Technicians with the skills to monitor pumps, blowers and other water and wastewater treatment equipment, in addition to
analyzing water samples. The Northwest Campus through the Health Science Center offers the Renewable Energy Technology Program in healthcare and other
environments. Students trained in this program develop the skills to evaluate the patterns of energy use in buildings that typically have large energy needs such as hospitals, and provide solutions for energy efficiency.

When Eva Richardson packed her bags to participate in the Wayne County Community College District's Study Abroad trip to Brazil, she knew that the trip was not going to be just another stamp in her passport, but an
unforgettable learning experience that will pay dividends long after her college days are over at WCCCD. Richardson, a pre-nursing student, was one of 26 students who traveled to Brazil for a week of intensive educational and cultural study. The focus of the trip was to learn conversational Portuguese and study Brazil's role in alternative energy production, specifically ethanol from sugar cane. WCCCD students were invited to study at the Federal University of Sao Carlos in Sao Carlos, Brazil, about 200 miles from Sao Paulo. The university sits on 1,290 acres with about 150 acres of preserved land.

The students were accompanied by David C. Butty, Executive Dean for International Programs, Mary Jones, Vice President at the Downtown Campus, Judith Smouter, District Dean for Student Services, and Julie Figlioli, Project Manager in the Chancellor's Office. WCCCD students have experienced the world by studying languages, political, educational, and the economic systems in countries such as Austria, Australia, Argentina, France, Ghana, India, London, England, and Mexico. The trip was arranged through Escape Tour International, under the leadership of Irv P. Jones. While in Brazil, the students participated in Portuguese language classes. They were treated to a great texture on the various uses of ethanol and the reduction of carbon emissions. By leading scientists, including Professor, Dr. Octavio Antonio Valeche, Dr. Valeche, is a research scientist at the university's campus in Arara, about 60 miles from Sao Carlos. In an informative and inspiring lecture, he outlined some of the direct benefits of ethanol plus sugar cane included:

- Renewable energy generator
- Zero carbon balance
- Less dependence on petroleum (industrial process)
- Easy to produce in large scale
- Competitive costs
- Safe and efficient
- High miscibility with gasoline
- Reduces whole emission
- Low toxicity
- Sulfur free

Since the 1970s, Brazil has used sugar cane to produce ethanol fuel which allowed the country to become the world's second largest producer of ethanol and the world's largest exporter. Brazil also is considered to have the world's first sustainable biofuels economy and is a biofuel industry leader. Most of the automobiles in Brazil are flex-fuel, meaning that they can use either gasoline or alternative fuels such as ethanol. Today, there are more than 442 ethanol production plants in Brazil that produce alternative fuels such as ethanol. Today, there are more than 442 ethanol production plants in Brazil that produce alternative fuels such as ethanol. Today, there are more than 442 ethanol production plants in Brazil that produce alternative fuels such as ethanol. Today, there are more than 442 ethanol production plants in Brazil that produce alternative fuels such as ethanol.

The world is in danger because there are too many people that either do not know about climate change or do not care about it," said Dr. Valeche, who has been working in this area for more than 20 years to develop sugar cane as an alternative source of energy. He said that fuel cells and ethanol will decrease carbon emission. "The damages to Earth that CO2 causes are irreversible and beyond repair.

Laura Howard, a Dental student, studied Computer Information Systems and Cultural Anthropology. She said that the fact that students gained valuable insights to issues and topics on a global level was rewarding. According to Laura Howard, studying abroad helps to break down intimidating cultural and language barriers and can help one get to know the other side of different cultures. "The WCCCD's Study Abroad Program and the trip to Brazil is a major experience that will strengthen my education and broaden my horizons. Although I did not master the Portuguese language, the lessons learned will last a lifetime," said Ms. Howard.

Another student, Tiffany Mendryga, is a pre-nursing student, described the trip as "a major experience that will strengthen my education and broaden my horizons. Although I did not master the Portuguese language, the lessons learned will last a lifetime," said Ms. Howard.

Students at the Western Campus are becoming proficient in Sustainable Buildings and Sites Technology with skills to assess commercial and residential buildings. By understanding new operating standards such as Leadership in Energy and Environmental Designs (LEED), technicians are able to evaluate buildings for sustainability using energy efficient lighting and appliances, reducibility and recycling of materials, water efficiency and construction practices. Students at the Downriver Campus are learning about alternative fuels to service and repair compressed natural gas vehicles.

Green energy education is going to change the way education is delivered for future generations, and that means WCCCD students need to change the way we teach so that our students will be successful," said Dr. Stephanie Bulger, Vice Chancellor of Educational Affairs. Leading this effort, Dr. Bulger said, "I'm optimistic that when our students return from their study abroad trip to Brazil, they will be energized as we push for enrollment increase in our Renewable Energy programs."