



History of the Regional Autonomous Robotics Circuit founded in Bossier Parish

In 2008, two teachers from Bossier Parish Schools, Richard Warren (Benton Middle School) and Marvin Nelson (Benton High School), recognized their students' desire for science, technology, engineering, and mathematics (STEM) and cyber education beyond the classroom and began an annual robotics competition. With their vision and hard work, combined with support from Bossier Parish Schools' administration, the Northwest Louisiana Autonomous Robotics Competition (NwLA ARC) was born. This event was held each May at Benton Middle School and served over 200 students.

In 2010, the NwLA ARC committee asked the Cyber Innovation Center (CIC) to sponsor the event. CIC leadership recognized the value of the program and the potential of engaging a greater number of students through a strategic partnership. In order to help expand STEM and cyber learning opportunities in the region, the CIC partnered with the founding schools to host the 2010 and 2011 competitions and watched as participation grew each year.

During this time, the Cyber Innovation Center also received requests from both school administrators and teachers for more opportunities to engage their students in hands-on STEM and cyber learning throughout the academic school year. Thus, the Cyber Innovation Center offered to expand the annual competition to a circuit of competitions scheduled each fall, winter, and spring and took the lead on the administrative responsibilities.

The Regional Autonomous Robotics Circuit (RARC) kicked off in September 2011 in Bossier City, Louisiana. Thirty-seven different schools from seven parishes participated in the 2011-2012 RARC with 508 students in grades 4-12 benefitting from the program. The 2012-2013 RARC experienced a 41% increase in participation over the previous year with over 825 elementary, middle, and high school students from 48 schools participating. RARC reached a milestone during the 2013-2014 school year with 1,000 students impacted in a single school year.

The CIC is proud to report RARC has continued to grow not only in attendance but also the variety of students who benefit and the number of parishes/counties served. Teams from afterschool and homeschool programs as well as charter schools have joined the public and private school teams at the competitions. Additionally, RARC in Northwest Louisiana, originally open to students in grades 4-12, now includes students in grades 2-12. This STEM and cyber program is reaching students earlier and earlier and offering an opportunity to remain engaged at each grade level. The integrated competition guidelines align with Louisiana curricula standards, and the competitions build upon one another so students can enhance and hone their skills throughout the school year.

The Cyber Innovation Center works with school districts from other communities in order to expand the RARC "footprint." RARC South Louisiana (Baton Rouge) has been active since 2016. RARC curricula is also available for educators to use through the Cyber Innovation Center's National Integrated Cyber Education Research Center (NICERC).