

Innovation and Technology through Community Engagement

WCU & Western North Carolina: Regional Manufacturing Industry, Engineering Logistics, and Investigating Networks of Technical Clusters

Faculty Amber Thompson (acthompson@wcu.edu) organized a semester engagement project in Engineering Technology & Engineering Logistics (ET362), which provided valuable information about regional manufacturing. The main goal for the completed project was to map a web of industry clusters in the region with the additional information of logistical data about those industries. In order to map out the networks of technical clusters, each group conducted interviews with manufacturing industries in Western North Carolina (WNC). With the interview documentation, students used different methods to analyze the findings. They compiled the results in a matrix to determine if there were indeed manufacturing clusters in the region and developed charts to document supplier and customer network for each company. Students gained information about the type of product/services, importance of the company's current physical location, customers of the company, suppliers to the company, transportation systems for input and output of goods, number of employees at the WNC site, the company's presence in other areas, the company's measure of customer service, and the importance of product lifecycle and the recycle waste/scrap process.

About this collaborative project as an example of community engagement, Assistant Professor Thompson said, "The ET 362 Engineering Logistics course is part of the Engineering Technology – Technical Operations (ETO) distance program. One of the strategic advantages of the ETO distance program is that 98% of the students are already successfully employed with industries in Western North Carolina. For faculty and students, this means there is easy access to real data for research and grants, the foundation for a professional network for both the university and the student is already established, and projects for Project Based Learning are meaningful and cost-saving to companies. It is truly a joy to work with these students because each one brings professional knowledge to the classroom. The environment is learning centered instead of teacher centered."

If you would like your community engagement work recognized through the *STAR Engagement Projects* program, please submit your proposals through the [Community-based Activities Faculty Survey](#) administered annually in the spring semester from early April – late May.

