

Action Research Fellow: Tracy Arras	
Title:	Cooperative Learning in Engineering Graphics and Design: Adopting Greenwater Infrastructure Devices
Context:	CCE 201 – Civil and Construction Engineering Graphics and Design (Fall 2015 – 2 sections, Winter 2016 – 1 section) ~ 200 students
Short Description:	<p>The purpose of this research is to evaluate changes in CCE 201's team project to determine if changes strengthen student collaboration and interdependence. Changes include:</p> <ul style="list-style-type: none"> <li>• different weighting scheme of project grading;</li> <li>• student certification in project cover letter that they completed a specific engineering drawing sheet;</li> <li>• individual assessments of project content.</li> </ul>
Research Questions:	<ol style="list-style-type: none"> <li>1. Will changing the grading scheme on the group project allow students to work more collaboratively?</li> <li>2. Will adding verification of an individual's contribution in the cover letter allow students to work more collaboratively?</li> <li>3. To what extent does including an individual assessment of project content impact student collaboration?</li> </ol>
Proposed Data Collection	<p>Fall 2015, Winter 2016 Pre-, post- assessment questions</p>
Questions and Concerns	<p>Additional questions:</p> <ol style="list-style-type: none"> <li>1. Outside the scope of this research what other techniques can be used to strengthen interdependence on team projects?</li> </ol>