



Sam Edster-Mitchell & Curt Larkin  
Biology Teachers  
Norwalk HS / Des Moines East HS  
2019 Externs at Des Moines Public Works-  
Urban Forestry Department

<p><b><u>Part I: Overview of Workplace</u></b></p> <p>Des Moines Public Works - Urban Forestry Department, is responsible for developing, maintaining, and improving all aspects of the urban forest for the city of Des Moines.</p>	<p><b><u>Part II: Workplace Focus</u></b></p> <p>Tasks include identifying certain tree species and understanding the requirements for planting and growth for each species. A focus has been on identifying the trees that have failed to survive.</p>
<p><b><u>Part III: Introduce the Problem</u></b></p> <p>Due to a high failure rate of planted trees, what can be done to increase success rate?</p> <p>Exploration of planting process, location, species, collection of data (such as traffic, weather, and road conditions) should be included.</p>	<p><b><u>Part IV: Background</u></b></p> <p>Students will need to be familiar with ecology, the human impact on the environment, the interdependence of organisms, as well as utilize online data collection programs.</p> <p>Students will need to research methods that could increase the success rate of urban forests.</p> <p>This PBL will include collaboration with DM Public Works, Arbor Day Foundation, ARTichar, and Trees Forever- Growing Futures.</p>
<p><b><u>Part V: Workplace Solution</u></b></p> <p>DMPW Urban Forestry Department director, Shane McQuillan, is continually researching worldwide methods of successful urban forests. Most recent is the inclusion of biochar.</p>	<p><b><u>Part VI: Educational Pathways</u></b></p> <p>Jay- Job Title- Started out in entry level workforce and through various employers, he was able to get training for various certifications.</p> <p>Shane- Forestry Director-Received Bachelor’s of Science degree in Forestry. Gained experience through working various jobs internationally and in large metro areas.</p>