## GWTIP Educational Transfer Plan (2011)

### Teacher Information

<table>
<thead>
<tr>
<th>Name</th>
<th>Barbara B. Bittner</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>Potomac Falls High School</td>
</tr>
<tr>
<td>Grade Level and Content</td>
<td>Earth Science, 9th grade / GIS, 12th grade</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:Barbara.bittner@lcps.org">Barbara.bittner@lcps.org</a></td>
</tr>
<tr>
<td>Companies Visited</td>
<td>Fortessa, Loudoun Water</td>
</tr>
</tbody>
</table>

### Educational Transfer Plans

#### Workplace Competencies

**21st Century Skills**
- Workplace Computer Application
- Checking, Examining, & Recording
- Teamwork

- Student use of Microsoft Office Applications
- Students will record and assess data
- Students will learn to be a part of a productive team
- Students will adopt (role play) a variety of roles on a rolling basis, and contribute their assigned task to a final product.

#### Academic Competencies*

**SOLs**
- ES.1 The student will plan and conduct investigations
- ES.2 The student will demonstrate an understanding of the nature of science and scientific reasoning and logic.

- Use known physical rock properties to facilitate construction uses.
- Require students working in projects to rotate duties for each new project.
- Have students assemble various apparatus and tools prior to use in order to facilitate their mechanical reasoning.
- Students will prepare reports and presentations using Word, Power Point, Excel and Movie Maker.
- Laboratory exercises will be reworked to model industry projects where data collection, analysis and problem solving are the primary goal.
- Create classroom corporations (teams) with competing projects designed around encouraging students to use desired competencies and technologies to solve problems.
- Develop a list of off-site locations for students to explore, document and report to the class/teacher with information that relates to the classroom instruction.

#### Personal Effectiveness Competencies

**Dispositions**
- Willingness to learn
  - relate classroom experience to the world outside the classroom
- Initiative
  - opportunities to display personal initiative, both within and outside the classroom, will be encouraged, acknowledged and evaluated
- Professionalism
- Students will prepare, publish, and present project outcomes in a public forum.

*ES.1 and ES.2 allow more direct application of Workplace Competencies and Personal Effectiveness Competencies. ES. 3 through ES. 13 allow for additional application and reinforcement of the listed professional and personal competencies. Fortessa, Loudoun Water