# GW Teachers in Industry

## Educational Transfer Plans

From Corporation to Classroom

### Teacher Information

<table>
<thead>
<tr>
<th>Name</th>
<th>Jennifer Flynn</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>Academy of Science</td>
</tr>
<tr>
<td>Grade Level and Content</td>
<td>Integrated Physical Science, AP Environmental Science, Independent Research (10-12)</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:Jennifer.Flynn@lcps.org">Jennifer.Flynn@lcps.org</a></td>
</tr>
<tr>
<td>Companies Visited</td>
<td>INOVA, PPI</td>
</tr>
</tbody>
</table>

### Educational Transfer Plans

#### Core Knowledge

**Chemistry Connections:** Lab safety, measurement, accuracy, experimental design; Gas laws (fire propellants at Dulles, liquid oxygen at INOVA); Concentration and dilution (medicines, dosage); Nuclear chemistry, dosimetry; Specific heat (geothermal energy storage, ice makers, cooling towers); Colligative Properties (de-icers)

**Environmental Connections:** Wildlife management at Dulles; treatment and disposal of toxic chemicals; use of alternative energy; business “green” plans; environmental economic factors affecting business decisions; green schools in Alexandria; zeroscaping landscapes in an educational setting

**Physics Connections:** Electricity and advanced circuitry; changes and advancements in engineering field

#### 21st Century Skills

Create a values-based classroom culture that has a uniform buy in and is developed by the class; Adjust the physical space to create flow between different areas of the classroom and promote fluid learning; Have students take ownership of classroom by allowing them to create space that enables positive learning environment; When teaming, create multiple skill set teams; Instill the importance of number sense outside of a calculator; Emphasize the difference between and the importance of accuracy and precision in measurement and attention to detail; Start with the “why” in the classroom and spiral out to the “how” and “what”

#### Disposition and Corporate Connection

Have students record in lab notebooks time spent on lab tasks (both to demonstrate not enough and too much time spent on an individual task); From INOVA, stress the importance is the end product, not how much effort was put into the task (emphasize product not time); Implement a cultural sensitivity aspect to sophomore appropriate technology project

#### Corporate Connections

Radiation physicist at INOVA; Engineering tour at PPI; Leadership seminar

---

*For more detailed information concerning any of these ideas, please contact me via email*