



**Figure 1. Three Steps to WBL in the Classroom**

<p><b>Work-based Learning (WBL)</b> means sustained interactions with industry or community professionals in real workplace settings, to the extent practicable, or <i>simulated environments at an educational institution</i> that foster <u>in-depth, firsthand engagement with the tasks required in a given career field</u>, that are aligned to curriculum and instruction. The following three step process is a framework for educators to revise lessons, units, or course plans to incorporate WBL.</p>		
Step 1. Identify Desired Results	Step 2. Align to Career Tasks	Step 3. Simulate the Experience
<p>The teacher will write the concise and specific knowledge and skills attempting to be taught during the lesson, unit or AFNR course.</p>	<p>For each identified result, the teacher will ask and answer the following question: Which real-world career and task within that career will this knowledge or skill be utilized? The answer may be more or less obvious, and some desired learning outcomes may be applicable in a variety of career scenarios.</p>	<p>For each career task identified in the previous step, the teacher will ask and answer the following question: How closely can I simulate that experience for students with the facilities, time, and resources available? The answer to this question should be used as the instructional method and/or assessment for that specific knowledge or skill.</p>

**Figure 2. Case Studies in WBL**

Case Study A. Plant Breeding ( <a href="#">Link to Lesson Plan</a> )	Case Study B. Agritourism ( <a href="#">Link to Lesson Plan</a> )
<p>Ms. Georgia Feeny teaches Biological Science Applications in Agriculture (BSAA) to 10<sup>th</sup> grade students at John Adams High School in Philadelphia. Typically, Georgia incorporates a lesson on Plant Breeding during the Spring semester. A skill she would like her students to gain through this unit is defining the different types of hybrids. Georgia has access to a Greenhouse, and has a classroom budget for related expenses. In the past, this unit has been mostly lecturing and notes. Georgia wants to make it more engaging this year, so she following the three steps.</p> <p><b>1. Identify Desired Results</b> Georgia specifically wanted students to know the four types of hybrid crosses (double, three-way, single, and top-cross). She also wanted students to be able to select the appropriate method based on the intended outcome.</p> <p><b>2. Align to Career Tasks</b> When thinking about the knowledge and skills she wants her students to gain, Georgia identified that these skills would be most applicable in the case of a plant breeder making selections to develop new hybrids.</p> <p><b>3. Simulate the Experience</b> Georgia thought about how she could simulate the role of a plant breeder with the resources her program has available. While the program does not have a farm plot, she does have access to a greenhouse. She also noted that trying to use corn or soybeans for students to hybridize would take a while and may be difficult to identify visible trait differences without a massive sample size. With these things considered, Georgia decided to plan a plant breeding project for her students using petunias and to be conducted in the greenhouse. Her intention is to have students use ten petunia varieties to create a chosen hybrid (either double, three-way, single, or top-cross) with a unique color pattern. Then they will market that new hybrid at their spring plant sale! This would simulate the role of a plant breeder in planning, creating, and marketing new plant hybrids based on desired characteristics.</p>	<p>Mr. Jack Bolton teaches Agricultural Sales and Marketing to 11<sup>th</sup> and 12<sup>th</sup> grade students at East High School in Albuquerque. Jack teaches a small unit on Agritourism during this course. In the past, Jack has taught this unit through lecture and included an end of unit fieldtrip to the local apple orchard and pumpkin patch. However, Jack is thinking that this fieldtrip, while fun, is not quite as challenging to students as it should be for their age and ability. Jack has a good relationship with the business owner at the local Orchard, and his students all have access to chrome books. With these things in mind and in an effort to make the course more rigorous and engaging, Jack followed the three steps.</p> <p><b>1. Identify Desired Results</b> Jack specifically wanted students to know different methods of marketing an Agritourism-based business. He also wanted students to be able to make an informed recommendation to a business owner if consulted on different marketing methods.</p> <p><b>2. Align to Career Tasks</b> When thinking about the knowledge and skills he wants his students to gain, Jack decided that the most realistic career task for this lesson would be in the case of a Marketing Consultant working with a specific Agritourism business to develop a strategic marketing plan.</p> <p><b>3. Simulate the Experience</b> Jack thought about how he could simulate that experience using the resources available to him and his students. While students do not have the expertise or time to individually work with different businesses, he thought perhaps the Orchard owner would be willing to work with the class as a whole to create a marketing plan. With their chrome books, students could work on the plan collectively over a shared document and each could do independent research on the marketing scenario. With these things in mind, Jack decided to conduct a class project to create a marketing plan for the local orchard. He also intends to use this in the Marketing Plan Career Development Event!</p>

**Figure 3. WBL Instructional Framework**

Step 1. Desired Results	Step 2. Align to Career Tasks	Step 3. Simulate the Experience
<p><b>1A.</b> What lesson, unit, or course will you be incorporating WBL-style instruction?</p>	<p><b>2A.</b> Which AFNR pathway is this lesson, unit, or course most clearly aligned?</p>	<p><b>3A.</b> What resources or support do I have available to simulate the identified tasks or responsibilities?</p>
<p><b>1B.</b> What do you want students to <i>know</i> before the conclusion of the lesson, unit, or course?</p>	<p><b>2B.</b> Which career is this lesson, unit or course most clearly aligned?</p>	<p><b>3B.</b> How much instructional time (minutes, days, weeks, etc.) do I have to dedicate to simulating this specific career task simulation?</p>
<p><b>1C.</b> What do you want students to <i>be able to do</i> (skills) before the conclusion of the lesson, unit, or course?</p>	<p><b>2C.</b> What specific task or responsibility within the given career demonstrates the knowledge and/or skills desired to be learned?</p>	<p><b>3C.</b> How can I incorporate interactions with industry or community professionals for this simulation?</p>
<p><b>Conclusion Questions</b></p> <ol style="list-style-type: none"> <li>1. How will you simulate this career task for your students? (Describe your plan!)</li>   <li>2. How will you know if they have learned the intended knowledge and skills? (Think measurable assessment: rubric, checklist, etc.)</li> </ol>		