GETTING YOUR HANDS DIRTY

A beginning resource for teachers regarding school gardens and garden-based lessons

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ENV 307: Final Project
2010 – 2011
Garden-Based Lessons

- School gardens are increasing around the country.
- They’re engaging “outdoor classrooms” for elementary students, perfect for interactive, hands-on learning.
- School gardens have enormous potential as tools once a few obstacles are overcome.
- My final project for ENV 307 is a resource for teachers beginning to teach in the garden, and includes two lesson plans.
Widespread Benefits

- Gardens raise awareness about food & nutrition
- Plus, students are more likely to eat vegetables!
- Improve student attitudes toward the environment
- Foster better understanding of the natural world
Not quite ready to get your hands dirty?

You’re not alone!

Teachers’ major concerns:

1. Lack of gardening knowledge
2. Must fit in with curriculum standards
3. It takes too much time

Even with its amazing benefits, there are obstacles to taking advantage of a school garden for teaching.
In order to overcome these obstacles and help teachers begin to integrate garden-based lessons into their curriculum, classmates and I have developed lesson plans and guides.

**My lesson plans**

- Two second-grade lesson plans for mathematics in the garden
- Developed with Core Curriculum Standards
- Easy-to-use worksheets and activities
- Simple starting point to begin garden-based teaching!
You don’t have to know a lot about gardening to start teaching in one!

Begin with a topic you’re already comfortable with.

How about math?

The garden is full of great things to measure!

Once you and your students are comfortable, learn and develop your gardening knowledge together.
Common Core State Standards (CCSS)

- Adopted by New Jersey in June 2010
- Phasing in CCSS 2010–2011
- Current standards:
  - 2008 New Jersey Core Curriculum Content Standards (NJCCCS)
  - Both CCSS and NJCCS cognates included in lesson plan

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<tr>
<th>Measurement and Data</th>
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<td>Measure the length of an object using appropriate tools</td>
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<td>Measure the length of an object twice, using length units of different lengths</td>
<td>2.MD.2</td>
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<td>Estimate lengths using inches, feet, centimeters, and meters</td>
<td>2.MD.3</td>
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<td>Use addition and subtraction within 100 to solve problems involving lengths</td>
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<th>Operations &amp; Algebraic Thinking</th>
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<td>Use addition and subtraction within 100 to solve word problems with unknowns</td>
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My lesson plans use this book as an informal introduction to gardens and the bugs that live in them.

Then, the lesson worksheets use characters from the story as a basis for exploring and measuring in the garden.
Lesson 1: Worm's Garden
Students explore the garden through Worm and Spider's eyes, making measurements and estimations using standard units of length.

Lesson 2: Worm and Spider Go Climbing
Students get more practice making measurements in the garden and return to the classroom to compare and discuss their results.
References


