Classroom Gardens and the NGSS

Maureen Klein
Bennie Elementary
Allen Park, Michigan
@maureenklein
Goals

• Provide an overview on how we created our courtyard garden

• Explore a phenomena we investigated

• Examine ways to use the garden as a gateway to authentic cross-curricular learning
A glimpse into our Garden
How does the Bennie Garden Grow?

• Established in 2010 through grants from the MDSTA and our local PTA.

• Labor required for start up

• Soil testing through Michigan State Extension

• Maintenance through the years/seasons
By centering science education on phenomena that students are motivated to explain, the focus of learning shifts from *learning about* a topic to *figuring out* why or how something happens.
Kids & Chrysalis in Room 107

What do you notice?

What are you wondering?

Our green chrysalis was attached to the mesh.
Why are the chrysalis different colors? Where did the caterpillars go?

- Observe the chrysalis
  - What do you notice?
    - What are you wondering?
Asking Questions

Productive Discussions

What makes some black swallowtail larvae chrysalis green and others brown?

• maybe they're different genders

• maybe since the weather has changed, maybe it affects the color of it

• maybe they are at different stages in the cycle of chrysalis
4th Grade

- Garden as a natural fit with the Science & Engineering Practices
- Science Journals to document progress
- Connection to Social Studies & ELA
Math
Art in the Garden
To Be An Explorer of the World

- Always be looking. (Notice the ground beneath your feet)
- Consider everything alive and animate.
- Everything is interesting. Look closer.
- Alter your course often. Observe movement.
- Observe for long durations. (and short ones)
- Notice the stories going on around you.
Science in the Garden
www.scienceinthegarden.weebly.com
“Study the science of art. Study the art of science. Develop your senses - learn how to see. Realize that everything connects to