GLENVILLE STATE COLLEGE

CRELLIN ELEMENTARY SCHOOL GARRETT COUNTY, MARYLAND

MATH/SCIENCE PARTNERSHIP

The Partnership led to a variety of enrichment experiences for the Crellin Elementary Students and instructional opportunities for the GSC Pre-service K-6 Teachers. Science Dialogues between Crellin Elementary Students and GSC Pre-service K-6 Teachers and Faculty via Polycom and On-Site Visits



Elementary Student Conduct Research on 40-ft Radio Telescope at NRAO Green Bank directed by GSC Preservice K-6 Teachers and develop an understanding of Astronomical Bodies



Campus Visitation

6o-Km Bike Path Challenge

Mist Netting

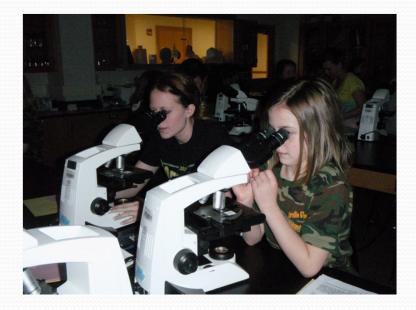




Student Engagement

Cell Slides

Silver-Mirrored Bottle





Development of Research Activities

Ideas for the Research Projects were Created by the Crellin Elementary Teachers in Collaboration with GSC Science Faculty.

Activities were Designed by GSC Pre-service K-6 Teachers as Partial Fulfillment of the Requirements for Science 302.

SPARKLabs were formatted by Dr. Kevin Evans, Professor at Glenville State College. Implementation of K-5 Agricultural Research Experiences by an Elementary School in collaboration with a Teacher Education Program

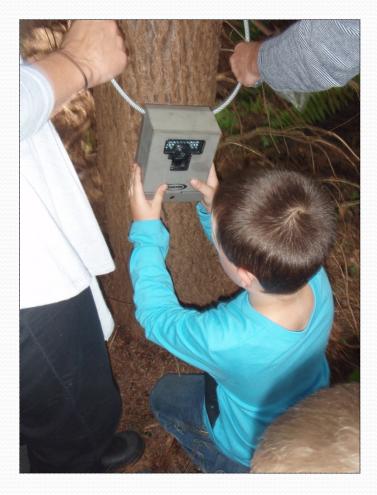
Dana McCauley, Kevin Evans, & Joe Evans

Agricultural Research Experiences at Crellin Elementary





Kindergarten Scientists



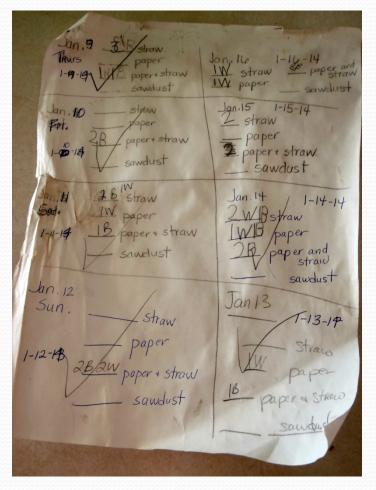




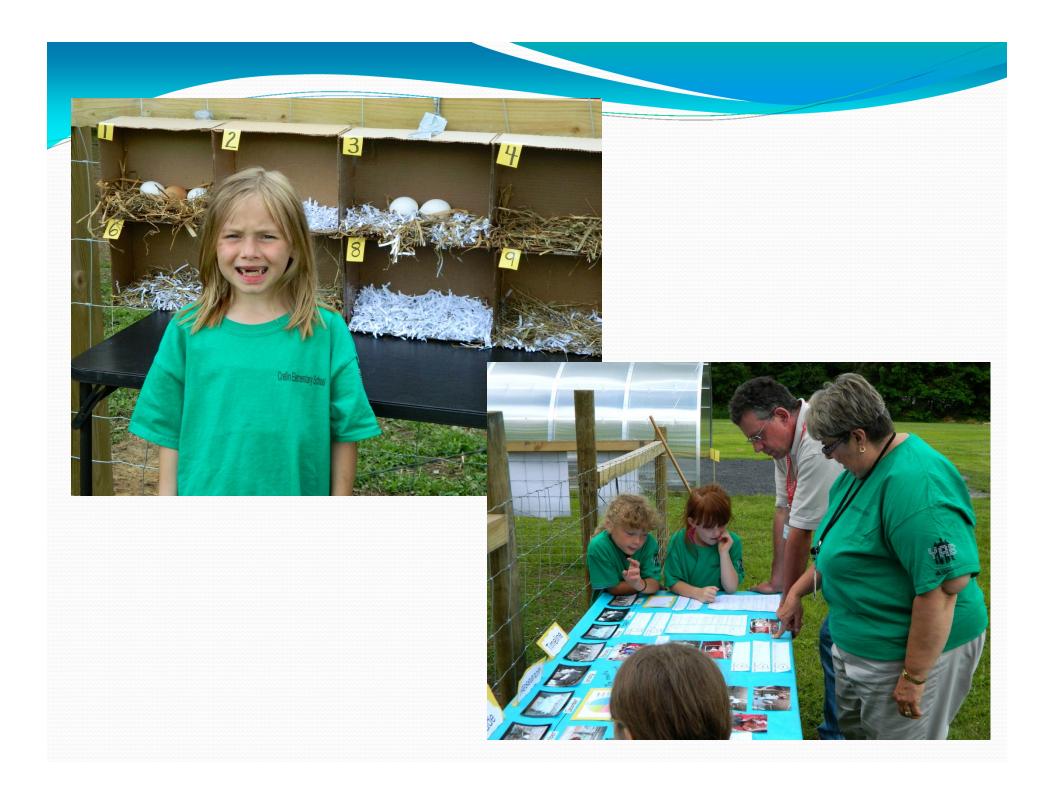




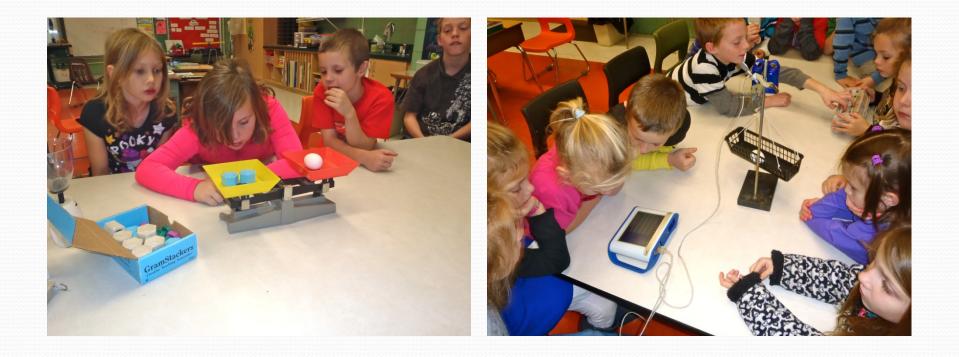
First Grade Scientists



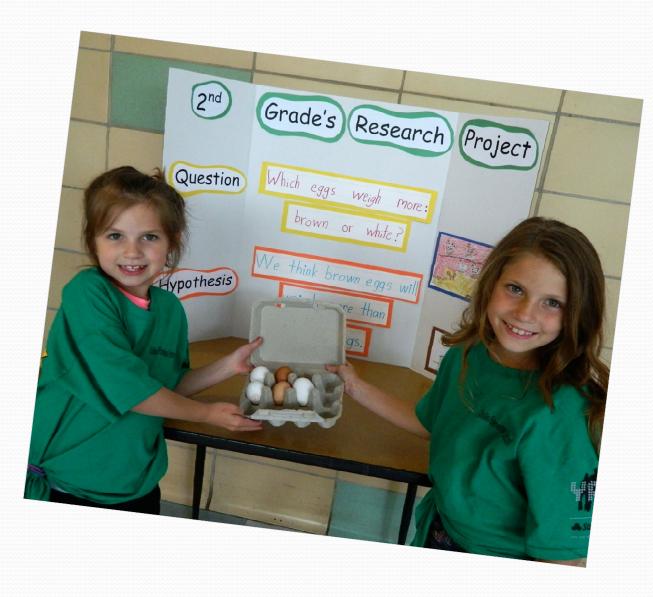




Second Grade Scientists



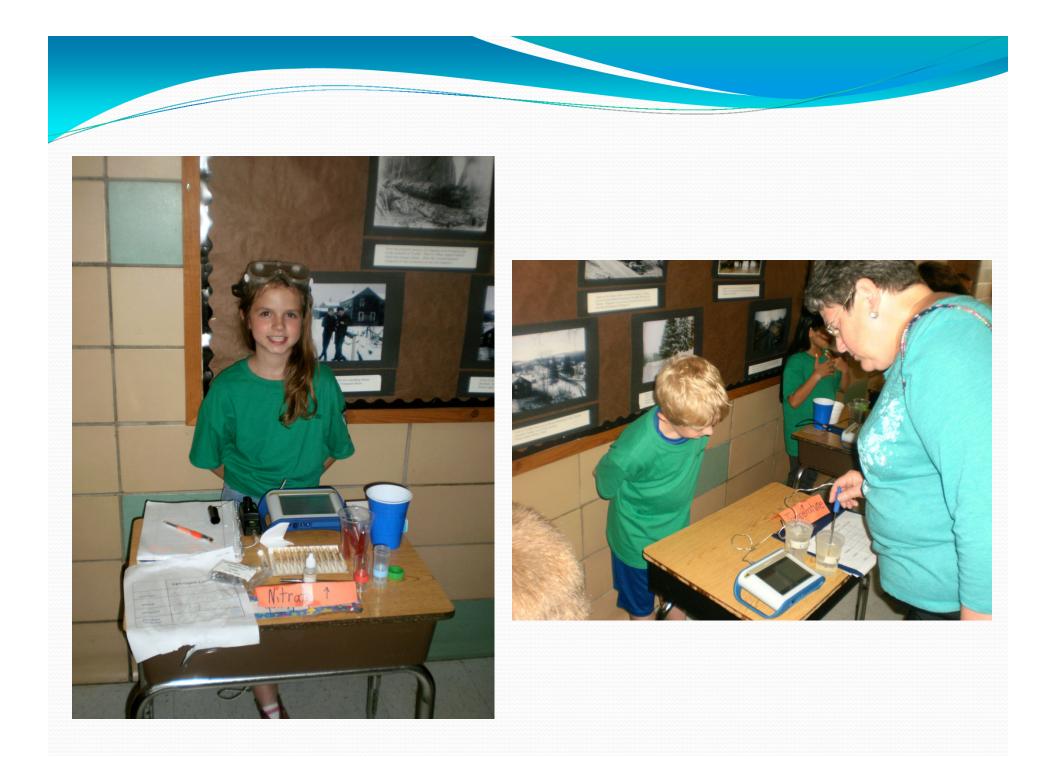
Students concluded that on average our brown eggs weighed more than our white eggs.



Third Grade Scientists







Fourth Grade Scientists







Fifth Grade Scientists

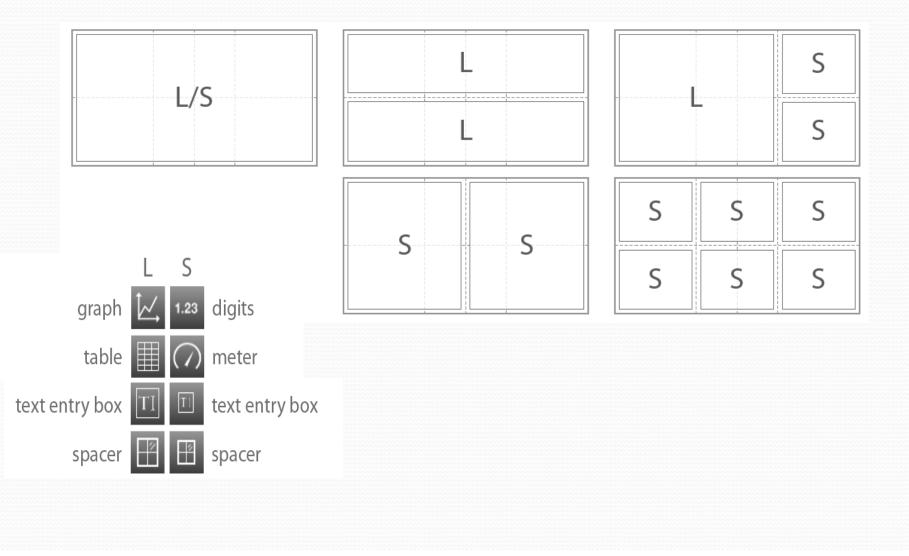




Storyboard

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Page Layouts



Static Content: Background images and text (created in PowerPoint)

Interactive Content: Pasco sensors (graph, table, digit, or meter display) and text boxes

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average			interactive small text entry box for student answer
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Static Content

- Authoring Template provided by Pasco (<u>www.pasco.com/sparkvue</u>)
- Enter all static content (text and images) into appropriate location in PowerPoint
- Save each page as PNG or JPEG graphics

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mass	create interactive bar chart	Do white eggs weigh more than brown eggs?		Click to add	
average		create interactive small text entry box for student answer			

Interactive Content

- Insert JPEG or PNG image as background image
- Insert interactive elements 🔀 🏢
- Insert remaining slides
- Save and distribute to SPARK science learning systems

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Agricultural SPARKLabs

- Egg Count:
 - Do white chickens lay more eggs than brown chickens?
 - Do chickens lay more eggs in the summer or winter?
- Egg-xact Measurements:
 - Do white eggs weigh more than brown eggs?
 - Do eggs laid in the summer weigh more than eggs laid in the winter?
- Soil Quality:
 - Does commercial fertilizers, chicken manure, or lamb manure provide the most nitrogen to soil in the form of nitrate?
 - What effect does commercial fertilizer, chicken manure and lamb manure have on pH?
- Sheep Activity:
 - Does precipitation (rain, snow, sleet, etc.) effect the activity of sheep?
 - Does high temperature effect the activity of sheep?