Science /STEM UPDATE
NGSS

**EMPHASIS:**

- Scientific and Engineering Practices
- *Performance Expectations*
- **Greater** emphasis on *applications of science*
Timeline

- **CMT and CAPT Science** assessments administered at least through Spring 2015
- 2013-2016: Consortia develop new science assessments.

**TENTATIVE TRANSITION:**

- 2014-16: Districts develop and transition to new science curriculum and teaching methods. Lots of PD for teachers!
- 2016: first administration of new science assessments?
Scientific & Engineering Practices

1. Asking questions and defining problems
2. Developing and using models
3. Planning and carrying out investigations
4. Analyzing and interpreting data
5. Using mathematics and information and computer technology
6. Developing explanations and designing solutions
7. Engaging in argument
8. Obtaining, evaluating, and communicating information
PLAN

- K-6 SCIENCE FACILITATORS
- STAFF 7-12
- PARTNERSHIPS
PARTNERSHIPS

- YALE
- QUINNIPIAQ
- UNH
- UCONN
- CITY OF WEST HAVEN
- SCSU
- GATEWAY
- ACE PROGRAM
- PLTW
Yale Peabody Museum Fellowship

- Global Climate Change
  - Grant used to develop an Event Based-Curriculum “mini unit” to address CT Science Standard 4.2 — **Deanna Pucillo** was 1 of the educators
  - **Deanna presented at the National Science Convention in Boston**
Quinnipiac University TQP Grant and ACES Consortium

- **12** teachers will participate in a week long summer institute at Quinnipiac University

- **3** teachers will participate in a two week long summer institute at ACES

- Science/STEM Units will be developed
<table>
<thead>
<tr>
<th>WEEK</th>
<th>MODULES</th>
<th>TEACHER/S</th>
<th>SCHOOL</th>
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</thead>
<tbody>
<tr>
<td>A July 7 – 11</td>
<td>MS Biological Sciences– CT Science Standard 7.2: The Remaining Systems of the Body (Digestive, Skeleton etc.)</td>
<td>Robert James</td>
<td>Bailey Middle School grade 7</td>
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<tr>
<td>A July 7 – 11</td>
<td>MS Physical Sciences - CT Science Standard 6.1: Properties of Matter</td>
<td>Sheri Mitchell</td>
<td>Bailey Middle School grade 8</td>
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<tr>
<td>A July 7 – 11</td>
<td>HS Physics– Electromagnetic Spectrum</td>
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<tr>
<td>B July 14 – 18</td>
<td>MS Biological Sciences - CT Science Standard 8.2: Genetics – Heredity &amp; Evolution</td>
<td>Robert James</td>
<td>Bailey Middle School grade 7</td>
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<tr>
<td>B July 14 – 18</td>
<td>MS Earth &amp; Space Sciences</td>
<td>Ralph Carrano</td>
<td>Carrigan Intermediate School grade 6</td>
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<tr>
<td>B July 14 – 18</td>
<td>HS Chemistry 1 – Polymers</td>
<td>Kate Tarallo</td>
<td>WHHS grade 10</td>
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<tr>
<td>B July 14 – 18</td>
<td>HS Chemistry 2 - CT Science Standard 9.3: Sustainability Resources</td>
<td>Joanne Poffenberg</td>
<td>WHHS Chemistry</td>
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<td>B July 14 – 18</td>
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<td>Erin Bode</td>
<td>WHHS grade 10</td>
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<tr>
<td>C July 21 – 25</td>
<td>MS Physical Sciences– CT Science Standard 8.1 &amp; 8.4 – Forces, Moments, Torque &amp; Statics (Bridges)</td>
<td>Jeannie Vaiuso</td>
<td>Bailey Middle School grade 8 STEM</td>
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<tr>
<td>C July 21 – 25</td>
<td>HS Biochemistry– DNA analysis, acid, base and buffer prep and forensic applications</td>
<td>Shannon Cribbin</td>
<td>WHHS grade 9</td>
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<tr>
<td>C July 21 – 25</td>
<td></td>
<td>Kim Patnaude</td>
<td>WHHS grade 9</td>
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WHHS

University of New Haven
- Charge Into Your Future
- Project Lead the Way

Southern CT State University
- GLOBE

University of Connecticut
- Engineering Ambassador Program
- UCONN Junior Sciences and Humanities Symposium
CONTINUED

**Yale University**
- Pathways to Science
- Evolutions
- Discovery to Cure HS Internship
- S.C.H.O.L.A.R. Program

**Gateway Community College**
- Girls in STEM Workshop

**ACE Mentoring Program**
PARTNERS