## Maryland Next Generation Science Standards Implementation and Planning Document

### PHASE 1
Spring 2013-2014
Exploration, Awareness, and Statewide Capacity Building

### PHASE 2
2014-2015
Classroom Transitions, Shifts, and Practices

### PHASE 3
2015-2016
Leveraging Materials, Resources, and Expertise

### PHASE 4
2016-2017
Statewide Application, Assessment, and Coordination

### PHASE 5
2017-2018
Full PreK-12 Implementation

### ONGOING STATEWIDE COORDINATION AND COLLABORATION TO SUPPORT TEACHERS, SUPERVISORS, ADMINISTRATORS

### Communication: MSDE, State Science Leadership Team, LEA Science Supervisors
- Develop common messages
- General Outreach on Shifts
- Ongoing Consistent messaging

### Statewide Capacity/Network Building: MSDE Programs; State Science Leadership Team; LEA Science Supervisors
- Identify existing expertise and gaps
- Develop NGSS Support Networks
- Ongoing Support of Leadership Network

### Professional Learning: MSDE Programs, State Science Leadership Team, LEA Science Supervisors, Teachers, Administrators, Informal Educators

<table>
<thead>
<tr>
<th>Identify professional learning needs: teachers, administrators, and informal educators – LEA Progress Updates</th>
<th>Professional Learning designed for all Stakeholders: Regular Updates at Maryland BOE meetings; Briefings, and IHE</th>
<th>Professional Learning: Implementation for teachers and administrators at all levels at CCRC : Sessions – NGSS 101; EQuIP NGSS Rubric; Assessment; DL</th>
<th>Professional Learning: Implementation for Informal Educators and ongoing adaptation of Professional Learning</th>
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### Instructional Practices/Shifts: MSDE, State Science Leadership Team, LEA Science Supervisors, Teachers, Administrators, Informal Educators

| Focus on the Framework to inform development of PreK – 12 Scope and Sequence which incorporates the Science and Engineering Practices | Continue to focus on equity (all students) and integrating the Science and Engineering Practices and Cross Cutting Concepts | Focus on the Integration of the 3 Dimensions ($ and E Practices, Cross Cutting Concepts, and Disciplinary Core Ideas) | Instructional Shifts in place Statewide; development of Formative Assessments for use at varied levels |
|----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------
| Assessments developed: beginning with classroom assessment and moving to monitoring (large-scale) assessment. |

### Instructional Materials and Curriculum: MSDE Programs, State Science Leadership Team, LEA Science Supervisors, Teachers

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<tr>
<th>Evaluate existing material using the EQuIP NGSS Rubric</th>
<th>Adapt existing materials and ongoing exploration of e-innovations</th>
<th>Evaluate newly developed material using the Rubric on an ongoing basis</th>
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### Assessment: MSDE Programs, LEAs, LEA Science Supervisor, Administrators, Teachers

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<tr>
<th>Align existing State assessments with NGSS (to the extent feasible)</th>
<th>Focus on developing classroom formative assessment systems</th>
<th>Participate in multi-state assessment consortium with NGSS adopted states</th>
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### Data: MSDE, LEAs, Administrators, Teachers

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<th>Determine metrics to be tracked (e.g. course taking, student achievement) to inform instruction</th>
<th>Develop data collection plan for formative &amp; summative assessments</th>
<th>Track and report science related data</th>
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### Policy Shifts: MBOE, MSDE, Legislature

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<th>Identify policy changes needed to implement NGSS (e.g. Teacher Certification, Teacher Evaluation, assessments)</th>
<th>Consideration of Alternate Pathways, Early College Admission Program, Approved CTE or Other</th>
<th>Piloting Assessments</th>
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