2019-2020 Louisiana Guide to Implementing IQWST: Grade 8

To assist teachers with the implementation of the eighth Grade IQWST curriculum, this document provides guidance regarding how IQWST modules correlate with the Louisiana Student Standards for Science (LSSS). The IQWST curriculum provides ample instructional guidance for teachers. This Louisiana Guide for Implementing IQWST goes a step further to point out places in which teachers may need to make strategic decisions considering student needs and time availability.

This guidance document is considered a “living” document as we believe that teachers and other educators will find ways to improve the document as they use it. Please send feedback to classroomsupporttoolbox@la.gov so that we may use your input when updating this guide.

Posted August 22, 2019
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Module Design

The IQWST modules use phenomena to drive three-dimensional science instruction. The incorporated phenomena are observable events that occur in the universe and can be explained by science. They establish the purpose for learning and help students to connect their learning to real world experiences and related phenomena. IQWST engage students in the science and engineering practices as they experience, investigate, and explain phenomena while learning core ideas. Students build understanding by connecting ideas across multiple disciplines of science and across middle school grades.

The modules include bundles of performance expectations that are built around an anchor phenomenon. The modules may include performance expectations from previous or future grade levels. These modules are intentionally designed to provide students the opportunity to incrementally make sense of phenomena to build understanding and abilities over time through a coherent storyline. Modification to the sequence or content of lessons within these units could undermine the design, and therefore is not recommended and should be approached with much caution and careful consideration.
## Standards by Module

<table>
<thead>
<tr>
<th>Module</th>
<th>Standards by Module</th>
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<tbody>
<tr>
<td>How can I make new stuff from old stuff? (Grade 8, IC2)</td>
<td>8-MS-PS1-1, 8-MS-PS1-3, 8-MS-PS1-6, 7-MS-PS1-2, 7-MS-PS1-4, 7-MS-PS1-5</td>
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<tr>
<td>Why do some things stop while others keep going? (Grade 8, PS2)</td>
<td>6-MS-ESS3-5, 8-MS-PS1-6, 8-MS-PS3-3, 8-MS-PS3-5, 6-MS-PS2-3, 6-MS-PS3-1, 6-MS-PS4-1, 6-MS-PS4-2, 7-MS-PS1-2, 7-MS-PS1-4, 7-MS-PS3-4, 7-MS-LS2-4, 7-MS-LS3-2, 7-MS-ESS2-5</td>
</tr>
<tr>
<td>How is the Earth changing? (Grade 8, ES3)</td>
<td>8-MS-EES1-4, 8-MS-EES2-1, 8-MS-EES2-2, 8-MS-EES2-3, 8-MS-ESS3-1, 8-MS-ESS3-2, 8-MS-ESS3-3, 8-MS-LS1-4, 8-MS-LS4-1, 6-MS-ESS3-4, 7-MS-PS1-4, 7-MS-PS1-5</td>
</tr>
<tr>
<td>Why do organisms look the way they do? (Grade 8, LS3)</td>
<td>7-MS-LS3-2, 7-MS-LS 4-4, 7-MS-LS 4-5, 8-MS LS1-4, 8-MS-LS1-5, 8-MS-LS3-1, 8-MS-LS4-2, 8-MS-LS4-3, 8-MS-LS4-6, 6-MS-LS1-2, 6-MS-LS 2-1, 6-MS-LS 2-2, and 7-MS-LS 2-4</td>
</tr>
</tbody>
</table>
### Alignment to EAGLE 2.0

The EAGLE 2.0 online tool supports formative assessment in the classroom and can be used in conjunction with IQWST’s assessment guidance to enhance teaching and learning. A Teacher’s Guide to LEAP 360 provides an overview of the online tool and information on how to access the science EAGLE assessment items. The assessment items that are included below can be used immediately following a unit of study to help measure student progress.

<table>
<thead>
<tr>
<th>Module</th>
<th>Eagle Discrete Items</th>
<th>EAGLE Item Sets and Practice Test Items</th>
</tr>
</thead>
</table>
| **How can I make new stuff from old stuff?** (Grade 8, IC2) | Marbles (8-MS-PS1-1)  
1014720 (8-MS-PS1-3) | Nitinol (8-MS-PS1-1, 8-MS-PS1-3) |
| **Why do some things stop while others keep going?** (Grade 8, PS2) | Potato Experiment (8-MS-PS3-3)  
Sailboat (8-MS-PS3-5) | Solar Cooker (8-MS-PS3-3, 8-MS-PS3-5) |
| **How is the Earth changing?** (Grade 8, ES3) | Fossils (8-MS-ESS1-4)  
SARocks (8-MS-ESS2-1)  
Mushroom Rock (8-MS-ESS2-2)  
Planet_Earth (8-MS-ESS2-3)  
Pollutants (8-MS-ESS3-3) | NCSlides (8-MS-ESS2-2, 8-MS-ESS3-2)  
Tsunamis & the Louisiana Coast (8-MS-ESS2-1, 8-MS-ESS3-2)  
Opal (8-MS-ESS3-1, 8-MS-ESS3-3)  
Tornado_8 (8-MS-ESS3-2) |
| **Why do organisms look the way they do?** (Grade 8, LS3) | Daisies (8-LS1-5)  
Miles Davis (8-LS3-1)  
Embryo Development (8-LS4-2)  
Horses (8-MS-LS4-2)  
Hummingbird (8-LS4-6)  
Horses (8-MS-LS4-6) | Surviving in Desert Landscapes (8-LS1-5, 8-LS1-4)  
Glowing Jellyfish (8-LS3-1, 8-MS-LS4-6) |
IQWST Materials: Access and Purchasing Information

Activate Learning offers IQWST as a Tier 1 science curriculum for grades 6-8. Print materials and kits are available for purchase. The Activate Learning, IQWST, Price List provides an overview of the materials and kits available through the Department’s Instructional Materials Contract Pricing.
IQWST offers professional development sessions that invite teachers to rethink previous teaching and learning strategies and construct new expectations for students’ outcomes. As educators, leaders, and administrators engage with the curriculum and trainings, they learn how to push student thinking and encourage classroom discourse. The chart below provides an overview of the professional development services that are available.

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
<th>Method</th>
<th>Duration</th>
<th>Initial Support</th>
<th>Ongoing Support</th>
<th>SPED Supports</th>
<th>ELL Supports</th>
<th>Max # of Participants</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial One-Day Institute</td>
<td>This one-day institute provide educators with the opportunity to engage with the IQWST materials. Participants investigate and explain phenomena, engage with the digital components of the program, learn how to navigate the curriculum resources, and how to implement the first module of study.</td>
<td>In-Person</td>
<td>One-day session</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>1 Facilitator for every 30 participants</td>
<td>$2200 per facilitator</td>
</tr>
<tr>
<td>Initial Two-Day Institute</td>
<td>This two-day institute introduce educators to the tenets of IQWST. Participants learn the facets of IQWST and key instructional strategies that are critical to the successful implementation of the curriculum. Participants develop and use models, articulate scientific principles, and write scientific explanations using the claims, evidence, reasoning framework. Participants also learn how to implement the first module and plan lessons.</td>
<td>In-Person</td>
<td>Two-day session</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>1 Facilitator for every 30 participants</td>
<td>$4000 per facilitator for two consecutive days</td>
</tr>
<tr>
<td>Initial Follow-up Institute</td>
<td>This one-day follow up institute provide educators with an overview of the next module in the IQWST curriculum. Participants take an in-depth examination of the science concepts in the module and build a conceptual understanding of the scientific principles. Participants also engage in learning from the student and teacher perspective.</td>
<td>In-Person</td>
<td>One-day session</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Number of Facilitators will be determined to meet the need</td>
<td>$2200</td>
</tr>
</tbody>
</table>
