

# Implementation Plan

## Preface

The Implementation Plan is designed to provide support to educators at various stages of implementation of Missouri's Learning Standards for Science while building capacity within all grades. State-level supports have been designed and will continue to be designed to support this implementation plan. Local districts are encouraged to develop implementation plans that meet district needs and may use this plan as a guide to create a district specific plan. This document has the sole purpose to help guide and is in no way the only way of implementing the standards.

# IMPLEMENTATION PLAN FOR THE MISSOURI LEARNING STANDARDS - SCIENCE

	<b>Exploration</b> Awareness and Building capacity	<b>Initial Implementation</b> Transition classrooms and practice	<b>Transition</b> Deeper Understanding	<b>Scale Up</b> Leverage resources and expertise	<b>Sustainability</b> Monitor Systems
Alignment	__ Designate a leadership team __ Create a timeline for district adoption & implementation __ Establish course sequence for middle school (integrated v. domain) and high school	__ Align grades K, 3, 6 & 9	__ Align grades 1, 4, 7 & 10  Implement teacher and administrator evaluation components that support implementation.	__ Align grades 2, 5, 8 & 11	__ Conduct ongoing review of teacher and administrator evaluation components that support implementation.
Professional Development	__ Read the Stage 1 Resources for teacher implementation __ Develop a thorough understanding of the 3 dimensions __ Begin lesson development	__ Continue integrating the SEPs and CCCs.  __ Focus on coherent units of study __ Collaborate across district lines to develop 3-D lessons and units.	__ Continue integrating the SEPs and CCCs.  __ Focus on coherent units of study __ Collaborate across district lines to develop 3-D lessons, units and formative assessment tasks.	__ Professional reflection __ Focus on attending to equity.	__ Professional reflection __ PD as necessary
Professional Learning Outcomes	__ Describe the Conceptual Shifts of 3-D teaching/learning.  __ Identify the three dimensions.  __ Explain the anatomy and architecture of the indicators.  __ Identify resources for further study.  __ Explore grade level or grade band standards and indicators.  __ Take a current lesson and shift it to include the 3 dimensions.	__ Describe what SEPs would look like in classrooms, providing examples of how to engage students in these practices.  __ Describe what CCCs would look like in classrooms, providing examples of how to reveal student thinking using the CCCs.  __ Continue lesson modification to include 3 dimensions and phenomena.  __ For an indicator, identify a possible performance task that would assess student learning of the 3 dimensions.	__ Take a current unit and shift it to include the 3 Dimensions.  __ Using the <a href="#">AMNH/BSCS 5 Tools and Processes</a> (or similar model), plan a coherent unit of study that integrates the three dimensions.  __ Develop a performance task that could be used in the classroom to assess student performance and understanding around an indicator or multiple indicators.  __ Develop formative and interim assessments aligned to 3-D indicators to monitor student growth.	__ Continue lesson, unit, and task development attending to equity.  __ Collect student data from tasks, collaborate across district lines to share data and reflect on student learning.  __ Use formative task data to refine lessons, units of instruction, and formative assessment tasks focused on attending to equity.	__ Continue lesson, unit, and task development.  __ Collect student data from tasks, collaborate across district lines to share data and reflect on student learning.  __ Use formative task data to refine lessons, units of instruction, and formative assessment tasks.

<b>Curriculum</b>	<ul style="list-style-type: none"> <li>__ Continue using existing curricula and reflect on which aspects of the 3 dimensions are addressed well.</li> </ul>	<ul style="list-style-type: none"> <li>__ Begin revising existing curricula with a focus on bundling indicators into classroom experiences.</li> </ul>	<ul style="list-style-type: none"> <li>__ Reflect on &amp; revise 3-D instructional units.</li> <li>__ Use knowledge gained to guide development of additional units.</li> </ul>	<ul style="list-style-type: none"> <li>__ Complete and vet new curricula.</li> <li>__ Facilitate ongoing reflection and revision of new curricula.</li> </ul>	<ul style="list-style-type: none"> <li>__ Facilitate ongoing reflection and revision of new curricula.</li> </ul>
<b>Instruction</b>	<ul style="list-style-type: none"> <li>__ Reflect on existing instructional practices and which aspects of the 3 dimensions are addressed well and which aspects are targeted for growth.</li> </ul>	<ul style="list-style-type: none"> <li>__ Focus on deliberate, guided integration of the science and engineering practices (SEPs).</li> </ul>	<ul style="list-style-type: none"> <li>__ Focus on deliberate, guided integration of the cross cutting concepts (CCCs).</li> </ul>	<ul style="list-style-type: none"> <li>__ Continue to refine, strengthen, and extend the use of 3-D instructional practices.</li> <li>__ Use 3-D formative assessment tasks.</li> </ul>	<ul style="list-style-type: none"> <li>__ Facilitate collaborative opportunities related to instructional practices.</li> </ul>
<b>Resources</b>	<ul style="list-style-type: none"> <li>__ Evaluate resources, materials, textbooks, etc. for alignment to all 3 dimensions.</li> <li>__ Collaborate with other districts to develop resources and share local resources</li> </ul>	<ul style="list-style-type: none"> <li>__ Use existing resources, materials, textbooks, etc.</li> <li>__ Vet any new resources, materials, textbooks, etc. against rubrics for alignment to 3 dimensions.</li> <li>__ Pilot new resources.</li> </ul>	<ul style="list-style-type: none"> <li>__ Adopt new resources.</li> <li>__ Identify cross-curricular and community connections to leverage and maximize the use of available resources.</li> </ul>	<ul style="list-style-type: none"> <li>__ Adopt any new resources that were not previously adopted.</li> <li>__ Monitor, assess, and vet resources for relevance and alignment.</li> </ul>	<ul style="list-style-type: none"> <li>__ Monitor changes in curriculum and instruction to anticipate future instructional resource needs.</li> </ul>
<b>Assessment Literacy</b>	<ul style="list-style-type: none"> <li>__ Statewide needs assessment to identify system supports needed.</li> </ul>	<ul style="list-style-type: none"> <li>__ Plan &amp; develop item writing workshops.</li> <li>__ Statewide needs assessment to identify system supports needed.</li> </ul>	<ul style="list-style-type: none"> <li>__ Pilot item writing workshop.</li> <li>__ Plan and develop 3-D assessment literacy supports (formative, interim).</li> </ul>	<ul style="list-style-type: none"> <li>__ Conduct additional item writing workshops.</li> <li>__ Conduct 3-D assessment literacy supports (formative, interim).</li> </ul>	<ul style="list-style-type: none"> <li>__ Conduct additional item writing workshops.</li> <li>__ Conduct 3-D assessment literacy supports (formative, interim).</li> </ul>
<b>Statewide Assessment</b>	<ul style="list-style-type: none"> <li>__ Assess 2008 GLE and CLEs.</li> </ul>	<ul style="list-style-type: none"> <li>__ Field test 2016 MLS new items.</li> <li>__ No operational assessment.</li> </ul>	<ul style="list-style-type: none"> <li>__ Assess 2016 MLS Standards and Field test new items.</li> </ul>	<ul style="list-style-type: none"> <li>__ Assess 2016 MLS Standards and Field test new items.</li> </ul>	<ul style="list-style-type: none"> <li>__ Assess 2016 MLS Standards and Field test new items.</li> </ul>