IMPLEMENTATION PLAN FOR NEBRASKA'S COLLEGE AND CAREER READY STANDARDS FOR SCIENCE

Scale Up

(2019-2020)

Leverage Resources & Expertise

Exploration (2017-2018) Awareness and Capacity Building

Initial Implementation (2018-2019) Classroom Transitions, Practices

Deep Implementation (2020-2021) Maintain and Refine Systems

Sustainability (2021-2022) **Monitor Systems**

Designate a leadership team, create a timeline for district adoption & implementation; establish course sequence for 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

Focus on integrating the SEPs and

Continue integrating the SEPs and CCCs: focus on coherent units of study; collaborate across district and ESU lines to develop 3-D lessons and units: 3-D formative assessment tasks

Professional reflection; focus on attending to equity

implementation

Read the Nebraska Science Standards Teacher Implementation Guide; develop a thorough understanding of the 3 dimensions and begin lesson development

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 subject area standards and indicators

Take a current lesson and shift it to include the 3 Dimensions

CCCs, collaborate across district and ESU lines to develop 3-D lessons; 3-D formative assessment tasks

Describe what Science and Engineering Practices would look like in classrooms, providing examples of how to engage students in these practices

Describe what Crosscutting Concepts 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 AMNH/BSCS 5 Tools and Processes (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 assessment 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 and ESU 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

Professional reflection; PD as

necessary

Collect student data from tasks, collaborate across district and ESU lines to share data and reflect on student learning

Use formative task data to refine lessons, units of instruction, and formative assessment tasks

Outcomes **Professional Learning**

IMPLEMENTATION PLAN FOR NEBRASKA'S COLLEGE AND CAREER READY STANDARDS FOR SCIENCE

Curriculum	Continue using existing curricula and reflect on which aspects of the 3 dimensions are addressed well	Begin revising existing curricula with a focus on bundling indicators into classroom experiences	Reflect on & revise 3-D instructional units; use knowledge gained to guide development of additional units	Complete and vet new curricula; facilitate on-going reflection and revision of new curricula	Facilitate on-going reflection and revision of new curricula
Instruction	Reflect on existing instructional practices and which aspects of the 3 dimensions are addressed well and which aspects are targeted for growth	Focus on deliberate, guided integration of the science and engineering practices (SEPs)	Focus on deliberate, guided integration of the cross cutting concepts (CCCs)	Continue to refine, strengthen, and extend the use of 3-D instructional practices; Use 3-D formative assessment tasks	Facilitate collaborative opportunities related to instructional practices
Resources	Evaluate resources, materials, textbooks, etc. for alignment to all 3 dimensions; collaborate with other districts to develop resources and share local resources	Use existing resources, materials, textbooks, etc.; vet any new resources, materials, textbooks, etc. against rubrics for alignment to 3-D; pilot new resources	Adopt new resources; identify cross-curricular and community connections to leverage and maximize the use of available resources	Adopt any new resources that were not previously adopted Monitor, assess, and vet resources for relevance and alignment	Monitor changes in curriculum and instruction to anticipate future instructional resource needs
Assessment Literacy	Plan & develop item writing workshops; statewide needs assessment to identify system supports needed	Pilot item writing workshops; plan and develop 3-D assessment literacy supports (formative, interim)	Conduct additional item writing workshops; conduct 3-D assessment literacy supports (formative, interim)	Continue item writing workshops; continue 3-D assessment literacy supports (formative, interim) attending to equity and culturally relevant assessment	Continue item writing workshops; continue 3-D assessment literacy supports (formative, interim) attending to equity and culturally relevant assessment
SCILLSS Assessment Grant	Needs Assessments developed and distributed: local self- evaluation tool and one state self-evaluation tool ToA & Validity Evaluation Framework: Purposes and Claims	Intra-assessment Focus: PLDs, Task Models, Items, and Blueprints exemplar sets of assessment design & development tools that clearly target the standards-based concepts & skills meant to drive assessment & instruction	Classroom-based Evidence and Tools create classroom assessment design & development tools that clearly target the standards-based concepts & skills meant to drive assessment & instruction elicit and gather classroom artifacts that illustrate these same concepts & skills for use in enhancing interpretation & use of large-scale assessment scores	State-specific Action Plans 1) summarize commendations & recommendations for future work 2) provide strategies for engaging assessment vendors in a process & approach for utilizing & replicating project outcomes and 3) identify what resources and steps are needed to support future work	Develop resources and supports as needed
Statewide Assessment	Assess 2010 Standards Field test new items	Assess 2010 Standards Field test new items	Assess 2010 Standards Field test new items	Assess 2017 Standards	Assess 2017 Standards