SYSTEMS

Making Sense of
SCIENCE

FORMAT

Three 7-hour days of professional learning

AUDIENCE

K–12 teachers, facilitators, and coaches with any level of experience

SEQUENCING

Ideal for sites looking for a comprehensive start to their NGSS implementation efforts and sites looking for a stepping stone from teacher knowledge of NGSS to teachers implementing NGSS-shifted instruction

RELATED MATERIALS

MSS has complementary student units focused on systems at grades K, 1, 2, 3, 4, and 5 designed from the ground up for NGSS. We recommend the Classroom Innovations PLC protocol as a continuing learning tool.

In this course, participants explore the multidimensionality of the NGSS, discuss how the NGSS supports equitable engagement of all learners, and do a deep dive into what the NGSS says about systems and how to use this and other crosscutting concepts to help make sense of core science and engineering content. The science learning begins with exploration of several systems across life, earth, and physical science. Participants use systems thinking and system models to help them make sense of real-world systems and explore the complexities of the scientific inquiry and engineering design processes. The course also leverages the Crosscutting Concept of Stability and Change to make sense of chemical systems and earth systems.

The course also provides an opportunity for participants to use their developing understanding of the structure and philosophy of next generation science education to evaluate NGSS-shifted student curricula — both preparing them to teach next generation science curricula and participate in state and district NGSS curriculum adoption efforts. MSS has short, complementary student units on systems for grades K, 1, 2, 3, 4, and 5, designed from the ground up for NGSS. These are ideal for the analysis in this course, but participants can use any systems student unit for this task.

Next Generation Science Implementation

The Next Generation Science Implementation (NGSI) suite of courses engages participants in multidimensional, adult-level science learning, investigations into next generation science mindset and pedagogical shifts, and strategizing for implementation. The NGSI courses are synergistic, so participants who engage with multiple courses develop a rich, multidimensional, and practical understanding of the properties of next generation science education and how to support implementation in their own context.

WANT TO KNOW MORE? Visit us online at **wested.org/mss** or contact us at **mssevents@wested.org.**

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