



# Nevada STEMList of Recommended STEM Program

## Renewed May 2025

### Making Sense of Science



#### Program Overview

The Making Sense of SCIENCE (MSS) program is a part of the Science & Engineering group at WestEd. Our professional learning supports educators and administrators as they work to engage all students in STEM classrooms by implementing research-based and high-leverage instructional practices shown to increase achievement. It has a proven track record of improving student achievement, especially for diverse students, including English language learners and students with poor literacy skills (Heller, et al, 2012). The professional learning is designed to intrigue and challenge every participant, regardless of their incoming experiences, knowledge, and skills. Participants walk away with meaningful personal learnings, a deeper understanding of effective STEM teaching and learning practices, and how to effectively use those strategies with their students.

#### Target Population Grades or Ages

K–12 STEM Teachers; School and District STEM Leaders (e.g., TOSA, instructional coaches, science specialists)

#### A Unique or Special Focus of the Program

Making Sense of SCIENCE has numerous professional learning offerings for teachers and administrators that are designed to meet their needs. This includes special focus areas on disciplinary content, data science, supporting multilingual learners, and disciplinary literacy (reading/writing in science). Our offerings include:

##### ◆ Teacher Professional Learning

###### **Bringing STEM Standards to Life: Engaging Strategies for Impactful Learning**

Courses that demonstrate how to integrate phenomenon-based approaches with a focus on science practices as a means of enhancing instructional effectiveness and deepening engagement for all students. *Courses include - Science & Engineering Practices, Cross-Cutting Concepts, Multidimensional Science Education.*

###### **Innovate & Elevate: Cutting-Edge STEM Learning for Educators**

Courses that empower STEM educators with the latest innovative instructional strategies that foster future-ready skills to prepare students for the careers of tomorrow. These courses are 2-3 days in length. *Courses include - Engineering Design course and our two Data Science course offerings: Boosting Data Fluency; Place-Based Approaches with Data*

###### **Deepening Disciplinary Expertise: Strengthening Core Knowledge for Effective Teaching**

Content-focused courses that engage educators in key disciplinary core idea domains known to be challenging for students. These courses vary in length from 2-5 days. *Courses include - Energy, Waves, Dynamic Earth, Genes & Traits, Force & Motion*

##### ◆ Science Leader and Administrator Professional Learning

Courses deepen leaders' knowledge of and experience with research-based, high-leverage science teaching and learning instruction so that they are better able to support STEM educators continued professional growth and development. Courses include — Supporting Science Instruction (1 day), Leader Facilitation Academy (5-day train-the-trainer model to prepare to lead MSS PL in your local setting)

##### ◆ Professional Learning Communities

Our MSS PLCs provide a collaborative and supportive environment for reflective practice and continuous improvement for STEM educators or leaders. Current offerings include — Making Sense of Student Work, Next Generation Classroom Innovations, and Adapting STEM Curriculum. Note: our PLCs can be personalized to meet your local interests and needs.

#### Impact on Participants

Making Sense of SCIENCE has been recognized nationally for its expertise in teacher professional learning, and was recently cited as an exemplar of scaling effective science programs [in a report](#) from the National Academies of Science, Engineering, and Medicine (NASEM). MSS professional learning is based on nearly 20 years of large-scale studies that offer compelling evidence that our approach strengthens the knowledge and skills of teachers and leaders across the US. Rigorous, large-scale research studies and national field testing have gone hand-in-hand with the evolution of MSS. Teachers demonstrate gains immediately after taking an MSS course, and their knowledge continues to increase over time. Their students benefit as well, with non-native English speakers and low-performing students making the biggest gains. See a summary of research reports on MSS effectiveness [here](#).

#### Resources Provided to Facilitators/Users

MSS offers an array of customizable services for teachers & science leaders. Each professional learning experiences provides teachers and administrators with tangible tools and resources to take back to their local settings.

#### Website

[www.wested.org/mss](http://www.wested.org/mss)

#### Contacts

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