

3-DIMENSIONAL INSTRUCTIONAL RESOURCES- AZ SCIENCE STANDARDS

[Science Standards Page](#) | [Science Resource Page](#) | [STEM Resource Page](#) | [Science & STEM Webinars](#)

Important note: The ADE acknowledges that the acronym “NGSS” is consistently used throughout science resources. To avoid confusion, we want to ensure the community understands that Arizona is not considered an “NGSS” state. To further clarify, AzSS and the NGSS were both designed using the research document, A Framework for K-12 Science Education. Both sets of standards include a strong focus on three-dimensional instruction, which includes: Science and Engineering Practices, Crosscutting Concepts, and Core Ideas. The major difference between the AzSS and the NGSS is that Arizona used an additional research document, Working with Big Ideas of Science Education, in the development of the Core Ideas of Knowing and Using Science.

PRODUCTIVE TALK/STUDENT DISCOURSE/EQUITY IN SCIENCE EDUCATION

Productive Talk & Student Discourse

[Talk Science Primer](#)

[Talk Moves Checklist](#)

[STEM Teaching Tool #6- How can I get my students to learn science by productively talking with each other?](#)

[Establishing Classroom Discussion Norms from SERP](#)

[Norms for Productive Discourse and Discussion from NGSX](#)

[Website with Draft Engineering Talk Moves](#)

Equity in Science Education

[STEM Teaching Tool #15- Overview: How can we promote equity in science education?](#)

[STEM Teaching Tool #40- How can Making promote equity and excitement in STEM?](#)

[STEM Teaching Tool #10- Teaching STEM in Ways that Respect & Build Upon Indigenous People's Rights](#)