



## Resource Guide: Why NGSS

### AWSP Theory of Adult Learning for your Community of Practice:

Learning happens when adults...

- Access expertise inside and outside of the room
- Participate in authentic activities with the group
- Practice with relevant Problems of Practice
- Engage (formally and informally) with colleagues
- Apply new learning to professional contexts
- Reflect on leadership and new learnings

This learning resource will engage you and your colleagues in learning more about the importance of NGSS. You will build awareness and learn more about how to implement the Next Generation Science Standards in your own setting. We envision this professional learning taking place in an ongoing community of practice. We encourage you to determine and proceed at your own pace that reflects the needs of your team.

Adult Learning Strategies you might consider when leading this learning:

- Joint Work Moves – Joint enterprise through participation in a collaborative effort
  - By working through the provided learning tools, you and your team will be able to collaborate to improve science learning in your context.
- Meta-Cognition – Moves that increase a learner’s awareness of subject matter and their own learning
  - Reflection questions are embedded into the learning tool subsections. Consider adding additional questions that fit your unique context.
- Differentiation – Different avenues to learning that match the learner’s readiness, interests, and preferred modes of learning
  - This professional learning includes a variety of modalities to meet the diverse needs of our learners. You can proceed through the learning tools based on readiness. A number of the resources allow you to go deeper based on interest.

This resource guide will take you through 4 learning tools you will be utilizing as part of this video-based professional learning. As you use each learning tool, download using the link provided and make sure you and each member of your team has access (this can be print or electronic). A number of the resources that can be accessed electronically include links to additional resources, should you want to go further with your learning.





Before getting started, *please complete* a very brief, 2-question pre-survey to help us gather information related to the usefulness of this video format and the learning tools that are included. We ask that you and each member of your team complete the survey (1-2 minutes). This survey can be found at

<http://tinyurl.com/WAElemPre>

### **Learning Tool 1) Implementing NGSS**

First individually reflect and respond: What are the NGSS?

Next, read through the infographic and reflect-- [How Will Science Education Change with the NGSS](#)

Watch [this video from the National Science Teachers Association](#) from the beginning through 7:45. Where do you see ideas from the infographic? What is 3D learning and what would you see students doing?

### **Learning Tool 2) Building Toward NGSS Classrooms**

Watch [this video from Achieve and the Teaching Channel](#).

When you finish watching the video, use the video note taking tool to record your thoughts and then discuss your thinking together as a team.

### **Learning Tool 3) How NGSS supports equitable science education for all students**

Read STEM teaching Tool #15: [How can we promote equity in science education](#) and discuss the reflection questions as a group.

Check out the [suite of STEM Teaching Tools listed in the Equity Group](#) on the STEM Teaching Tools website. Select and read through another STEM Teaching Tool of interest. As a team, you can select individually or agree on one as a group.

### **Learning Tool 4) Planning for NGSS**

Read through pages 7-15 in this report from WestEd, [Administrators Matter in NGSS Implementation](#). After reading, reflect and record your thinking:

- Where are you now?
- What might your next steps be?

### **School Leader Paradigm**

*Culture Sets the Foundation*  
*Systems Support the Culture*  
*Learning Shows the Belief*

School Improvement Planning Document: <http://www.awsp.org/docs/default-source/professional-learning-documents/video-workshops/school-improvement-planning-tool.pdf?sfvrsn=2>