

Phenomena-Based 3-Dimensional Instruction- Webinar Dashboard for 4.15.21

Facilitators: Rebecca Garelli: Rebecca.Garelli@azed.gov | Sarah Sleasman: Sarah.Sleasman@azed.gov

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

1	General Resources	<ul style="list-style-type: none"> ⊕ Presentation PDF: PDF of Slides ⊕ ADE Webinar Pathways
2	Resources from Lessons Showcased in Presentation	<ul style="list-style-type: none"> ⊕ More Picture-Perfect Science Lessons: Using Children's Books to Guide Inquiry, K-4 <ul style="list-style-type: none"> ○ Jamboard of Mystery Beads 5E Lesson ⊕ Ambitious Science Teaching Website <ul style="list-style-type: none"> ○ Tanker Car High School Video Gallery
3	Shifts in Instruction- More of, Less of	<ul style="list-style-type: none"> ⊕ New Vision for Science Education
4	Two Research Documents Used to Develop the 2018 Arizona Science Standards	<ul style="list-style-type: none"> ⊕ NRC Framework for K-12 Science Education ⊕ Working with Big Ideas of Science Education
6	NGSS: A Vision for K-12 Science Education Video	<ul style="list-style-type: none"> ⊕ YouTube Video Link for NGSS: A Vision for K-12 Science Education
7	Become Familiar with the AzSS 3-Dimensions Structure	<ul style="list-style-type: none"> ⊕ AzSS 3-Dimensional Snapshot for Educators & Administrators
8	Phenomena & Sensemaking in the AzSS	<ul style="list-style-type: none"> ⊕ Page 2 of AZ Science Standards Document
9	Using Phenomena with NGSS-Designed Instruction Video	<ul style="list-style-type: none"> ⊕ Interview with Brian Reiser about Phenomena
10	Alone Zone- Notice & Wonder	<ul style="list-style-type: none"> ⊕ See-Think-Wonder Table (make a copy)
11	Jamboard for Tanker Car Phenomena	<ul style="list-style-type: none"> ⊕ Driving Question Board Jamboard
12	Phenomena Video with Paul Anderson	<ul style="list-style-type: none"> ⊕ Scientific Phenomenon & Sensemaking
13	Shifts in Thinking About Phenomena	<ul style="list-style-type: none"> ⊕ Using Phenomena in NGSS-Designed Lessons and Units
14	Designing Phenomena-Based Instruction	<ul style="list-style-type: none"> ⊕ Designing Phenomena-Based Instruction 1-Pager
LESSONS & UNITS THAT INCORPORATE PHENOMENA		
15	Going 3-D w/GRC (Gather, Reason, Communicate) Lessons- FREE	<ul style="list-style-type: none"> ⊕ #Going3Dw/GRC Lessons Website
16	National Science Teaching Association (NSTA) Resources- <i>Some lessons called "Daily Dos" are free, for full access membership is required</i>	<ul style="list-style-type: none"> ⊕ Daily Dos: NSTA Daily Dos Sensemaking Lessons
17	Arizona Science Teachers Association (ASTA) Middle School Science Units- FREE	<ul style="list-style-type: none"> ⊕ ASTA Middle School Units Based on Arizona Science Standards
18	OpenSciEd Instructional Units- FREE	<ul style="list-style-type: none"> ⊕ OpenSciEd Open Resource Units
RESOURCES FOR FINDING POSSIBLE PHENOMENA		
19	Phenomena for NGSS	<ul style="list-style-type: none"> ⊕ https://www.ngssphenomena.com/
20	Project Phenomena	<ul style="list-style-type: none"> ⊕ https://www.ngssphenomena.com/
21	The Wonder of Science	<ul style="list-style-type: none"> ⊕ https://thewonderofscience.com/phenomena/
22	Project SING Phenomena	<ul style="list-style-type: none"> ⊕ http://questlc.org/phenomena/