

State and District Policy

In-person Breakout

By the end of today...

Opportunities/Challenges	DRAFT Goals	Actors and Actions
<ul style="list-style-type: none">• Limited science instruction happening, especially in elementary grades• Need additional investment in teacher professional learning with high-quality instructional materials• Local control is our reality, can make coherent equitable vision hard(er) to implement• Capacity and time at the district and state• Siloed funding streams• Need clearer and coherent local and state visions• Policy can often felt done to people and communities as opposed to done with and together	<p>Goal #1: Ensure high-quality science instruction is happening at scale in grades PreK-5 that supports a well-rounded education.</p> <p>Goal #2: Better understand effective and coherent state and district policies that support the implementation of the framework and document the processes state and district leaders use to ensure high-quality instruction for all students.</p> <p>Goal #3 Ensure all teachers are incentivized to engage in sustained in-service teacher professional learning through state and district policies that promote CEUs and/or microcredentials that lead to increases in compensation.</p>	<p>Example from Goal 2: HOW: Invest in a process that brings together state, district and classroom professionals to conduct an existing policy audit and set a vision and action plan to build coherent policies that support high-quality instruction. This work will likely include a policy audit at the state and district level and could result in a checklist or policy models that could be elevated nationally. This work might also result in a planning/relationship building process that could be replicated across states and districts.</p>

Brainstorm Ideas

Opportunities/Challenges

- Limited extent to which science actually occurs. Hard to envision how the framework could be implemented if science is not actually taught. There is always instruction in math and ELA. Quality and coherence is another matter entirely. Can't get where you need to go w/o high-quality science instruction. Incoherence results from so much testing - summative, interim testing, very little attention to quality and alignment of curricular materials, relatively little attention paid until recently around professional learning with how to use well-aligned. If science instruction were to occur, should be easier, could imagine starting with professional learning anchored in a high-quality instructional materials.
- Importance of coherence in the system, vertical, horizontal coherence, really cannot achieve equity without coherence. What it takes to achieve equity and coherence. That tension between local control policies and coherence. Teachers end up bearing the weight. How can these policies and local control, how can you work within that system or advocate for an adjustment to the system to advocate for coherence. Not only coherence between districts, but within a district, school to school and within a school and even within classrooms.
- LOCAL CONTROL
- LIMITED SCIENCE INSTRUCTION
- NOT FALLING INTO SAME PATH OF MATH/ELA

Brainstorm Ideas

Opportunities/Challenges

- Lots of opportunities to connect science professionals, local assets to instruction, partnership with industry open up to the facilities, internship opportunities. **PARTNERSHIP FOCUSED PEOPLE AT THE DISTRICT AND STATE LEVEL.**
- Local control is something we will have, are the districts setting up structures to allow principals to learn, they will feel spread thin, are district leaders making a commitment to pull principals into learning. Give access to new ideas and prioritize science for some of that learning **INCREASING SCHOOL LEADER CAPACITY PRIORITIZING TIME**
- Flexibility in the school day to continue learning after. Hours and Bells lock us into so much that prevents us from being innovative as teachers and leaders. Let's take some of the positives from the pandemic, revisit opportunities where and how students could learn. **TIME AND PLACE FLEXIBILITY.**
- Pause and look at state policy and have people who have a different lens to take a look at state policy to see how it actually is creating inequities, creating barriers for kids, creating barriers for a broader and more diverse group to become educators. Analyze what we have on paper and offer up alternative and more inclusive language. Ripple effect - can't rip up administrative code w/o having unintended consequences. **POLICY AUDITS**

Brainstorm Ideas

Opportunities/Challenges

- Lack of coherent vision on the ground for what to do with the funds to figure out how to use the funds to align to that vision.
- Don't showcase the examples of innovative pathways to get there, doesn't happen
- Teachers have to experience it themselves to internalize the vision of the framework

Brainstorm Goals

Goals

1. Identify and highlight policy models of effective science programs/districts
2. Model policy checklist that could be used in an audit to examine state and district policies that influence science teaching and learning
3. Clear theory of action/vision around science education that supports relationship and partnership building between federal, state, region, district, school, classroom - everyone on the same platform.
4. Partnerships coordinator at each region/district to ensure coherent alignment between partnership and the clear vision in connection with higher-ed, industry and CBO partners
5. Goal: To have high-quality instruction occurring in the elementary grades PK-5, strategy is NOT to implement a summative annual test. How: Create instructional tasks that exemplify good instruction, some consistency in grading, professional development component. Will eventually become mandatory, but start with X districts in Y states volunteering as a “pilot”, study the scheduling models that make this work
6. Support for at state and local levels, analysis of existing policies to root out inequities and increase coherence to move to the vision
7. State and district policies and funding to incentivize CEOs/microcredentials for life-long learners/teachers

Brainstorm Goals

Priority Goals

- 1. Goal #1: We need to ensure high-quality science instruction is happening at scale in grades PreK-5 that supports of a well-rounded education.**
 - HOW: We do NOT recommend an annual summative assessment, but rather propose developing a set of instructional tasks that exemplify good PreK-5 science instruction, provide some consistency in grading and include a professional learning component. These instructional tasks could eventually become mandatory across a state (STATE POLICY SHIFT), but start with X districts in Y states volunteering to pilot and teaming up with researchers and communications experts to study and refine the tasks, but also examine the scheduling models and change management pieces (professional learning, etc) that make this work.
- 1. Goal #2: Better understand effective and coherent state and district policies that support the implementation of the framework and document the processes state and district leaders use to ensure high-quality instruction for all students.**
 - HOW: Invest in a process that brings together state, district and classroom professionals to conduct an existing policy audit and set a vision and action plan to build coherent policies that support high-quality instruction. This work will likely include a policy audit at the state and district level and could result in a checklist or policy models that could be elevated nationally. This work might also result in a planning/relationship building process that could be replicated across states and districts.
- 1. Goal #3 Ensure all teachers are incentivized to engage in sustained in-service teacher professional learning through state and district policies that promote CEUs and/or microcredentials that lead to increases in**

Brainstorm Goals

Priority Goals

1. **Goal #4 Ensuring that educators have the time and capacity**
 - a. **Invest in partnership infrastructure by utilizing state or district funds to support each region/district to hire a partnerships coordinator.**
 - b. HOW: Utilize state or district resources to staff these positions and ensure these partnership coordinators are networked together and supported by state or national community of practice.

Summary Slide...

Opportunities/Challenges

- Limited science instruction happening, especially in elementary grades
- Need additional investment in teacher professional learning with high-quality instructional materials
- Local control is our reality, can make coherent vision of high-quality science instruction for all learners hard(er) to implement
- Limited capacity and time at the district and state
- Educators are incredible and have a lot on their plates
- Siloed funding streams
- Need clearer and coherent local and state visions
- Policy can often felt done to people and communities as opposed to done with and together

DRAFT Goals

Goal #1: Ensure high-quality science instruction is happening at scale in grades PreK-5 to support a well-rounded education.

Goal #2: Better understand effective and coherent state and district policies that support the implementation of the framework and document the processes state and district leaders use to ensure high-quality instruction for all students.

Goal #3 Ensure all teachers are incentivized and given time to engage in sustained in-service teacher professional learning through state and district policies that promote CEUs and/or microcredentials that lead to increases in compensation.

Actors and Actions

Example from Goal 2, which we will pick-up tomorrow

HOW: Invest in a process that brings together state, district, educators (both in and out of school), community members, caregivers and students to conduct an existing policy audit and set a vision and action plan to build coherent policies that support high-quality instruction. This work will likely include a policy audit at the state and district level and could result in a checklist or policy models that could be elevated nationally. This work might also result in a planning and/or relationship building process that could be replicated across states and districts.



Every presentation yesterday had policy implications at the federal, state and/or local level!

Policy works best when it is

- ❑ Collaborative
- ❑ Supported centrally, but contextualized locally
- ❑ Advances the programmatic goals
- ❑ Not an afterthought, but intentional



Stock Take Design Elements

(from Opening Yesterday)

Make Equity a Priority

Coherence

Student Learning Experiences

Professional Learning

Curriculum

Infrastructure



Introducing....



The Science Education Policy Collaborative

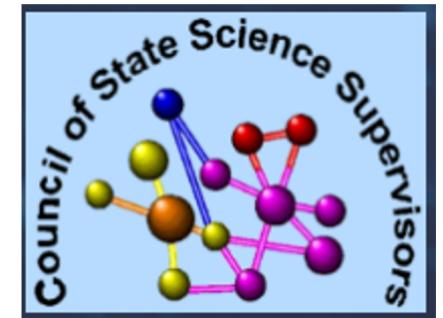
WHAT: a partnership coordinated by an organization like Learning Policy Institute in partnership with CSSS and NSELA to launch the SciEd Policy Collab that works to support the vision of high-quality instruction for every child and the design elements. The three coordinating partners would bring many other groups to the table to support the science policy work and the work of the initial collaborative (for example: National Academies, NSTA, ASCD, NASSP, NAESP, etc)

HOW: A group of states would opt-in/apply with a group of districts in their states to bring a TEAM to participate in a process that brings together state leaders, district leaders, educators (both in and out of school), community members, caregivers and students to:

- Conduct an existing policy audit
- Set a vision and action plan to build coherent policies that support high-quality instruction
- Intentional focus on rooting out ineffective policies
- Studying the impacts of policy changes at the state and district level
- Supporting states and districts with implementing policy change

The central staff for the collaborative would:

- Build a set of checklists or policy models that could be elevated nationally.
- Audit other non participating states and provide technical assistance where helpful
- Provide assistance with building baseline data and evaluation



This work could **grow** into a central coordinating hub for science education policy at the federal, state and district levels.

01	Finalize and Implement a Federal, State and District Policy Agenda	<ul style="list-style-type: none">• For example, would include:• Ensure high-quality science instruction is happening at scale in grades PreK-5 to support a well-rounded education• Ensure all teachers are incentivized and given time to engage in sustained in-service teacher professional learning
02	Launch a State and District Community of Practice	<ul style="list-style-type: none">• Invite rounds of states and districts to participate in a collaborative policy audit process
03	Keep a central repository of effective policies, examples and tools	<ul style="list-style-type: none">• Conduct audits that could be used by state and district leaders• Keep central examples of effective policies that advance high-quality science instruction