Evaluation Findings Brief Cohort 1 PreK Teacher Growth *February 2024*



86% of teachers reported using more best practices in at least 2 areas.

Teachers reported using best instructional practices across content areas more frequently after Seeds to STEM participation.

Teaching Efficacy (Confidence)



75% of teachers held greater

strongly Igree

student expectations in at least 1 area.

Teachers' perceptions of student Math, Science, & Nutrition outcome expectancy significantly increased after participating in Seeds to STEM.

Best Instructional Practices



55% of teachers reported growth in their confidence in at least 1 area.

Teachers reported significant growth in Math, Science, & Nutrition teaching confidence after participating in Seeds to STEM.

Student Outcome Expectancy





Ways Seeds to STEM supported Teaching Growth



8 preK teachers participated in focus group interviews across Philadelphia (*n* = 4) and Los Angeles (*n* = 4). 100% of teacher interview participants shared 3 ways the program supported growth in their teaching practices.

Seeds to STEM:	Exemplar quotes:
# 1 Increased teaching and learning resources in the classroom	 Tools: "You guys provided us with some awesome literacy tools." Resources: "I love the fact that you guys give us resources for us to grow the children's repertoire as far as knowledge"
# 2 Modeled how to integrate math, literacy, science, and nutrition	 "Anything she doesit covers math, scienceliteracy. It covers all the areas." "We get different ideas for how to incorporate math in our lessons."
# 3 Led to positive teacher outcomes including teaching confidence, teacher STEM knowledge, and learning of new instructional practices	 Teaching confidence: "After [the S2S facilitator] was providing those activitiesI feel more confident teaching more science because now I see that a lot of kids are interested. They really want to learn. They really want to touch and feel." Teacher STEM knowledge: "I can't grow things right. But the [S2S facilitator] gave me some tipsMaybe these particular seeds need to be shaded a little moreand when she came last week, all the plants are growing!" Instructional practices: "I think the program in itself honestly has really put a boost on [science] with the particular [S2S facilitator] that comes to our school. She has done so many little activities and I was like, 'You know, I thought about that, and I didn't even think of it as science'definitely getting new information, something else added to our toolbelt."



Ways Seeds to STEM Supported Students



100% of teacher interview participants shared 3 ways the program supported student learning.

Seeds to STEM:	Exemplar quotes:
<pre># 1 Increased exposure to healthy nutrition and to try new things</pre>	 [The students are] "not exposed to the fruits and vegetables that she's bringingthey're like 'What is that?' It helped them to open up, I think, the mental capacity of the children, seeing things they may not see at home." [The S2S facilitator] came back with some fruit. So the children tried kiwi for the first time." "helped us encourage them to try the blueberries [and ask] 'Have you ever tasted it? You might like it'." "They tried different types of potatoes. We had a purple potato. We had a sweet potato. We tried different types of things and none of [the students] said 'yuck.' None of them said 'I don't want to do it' because it was made funSeeds to STEM comes in and makes learning fun." [The S2S facilitator] "was coming to talk to us about nutrition and having the kids do their little taste testThey enjoyed that so we kept doing that. We kept incorporating new things."
# 2 Increased hands- on learning experiences	 "The kids wanted to touch the worms. 'Can we touch them?' They felt safe because they know the [S2S instructor]They feel safe to try new things and that's wonderful." "My kids never had an opportunitywe never provided worms for them to touch and feel and play with them." (describing S2S providing this opportunity) "She brought some bugs for them to have a sensory experience."
# 3 Elicited student interest and questions	 "Everything the [S2S instructor] is providingmy kids are really interested, like they really enjoy it." "The children look forward to the lessons." "They get excited." "The [S2S facilitator] brought plants, and the children were intrigued by the plants" "The children love the stories that [the S2S facilitator] incorporated into [the recycling topic]." "the kids talk among each other and extra tons and tons of questions pertaining to the worms. 'What do they eat?' 'Why do tho this?' That's literacy. Just talking [and asking] questions."



Teachers Communicated the Value of Seeds to STEM

to Families.



Three out of 8 teacher interview participants across both sites elaborated on the value of the program to families.

"I'm taking pictures because families want to see. I want families to see the great things that are happening. 'We will have this program. It's making it to the school. They're helping your children...' I like talking about it. And [S2S] opened it up to connect the school with the parent and even the community, because the services they were having."

" It's creating this environment of welcoming information...those **things are brought to the kids** versus...something they're **not going to experience or see at** home or within their community."

"I appreciate this program so much **because I love sharing it with our parents** and letting our parents know [that] we have people that come to us and **involved the children** and **things that they probably would never do**."

