

Early Start in Science Initiative Goals and Evaluation Matrix

The objective of the Early Start initiative's program evaluation is to formatively and summatively assess the progress the initiative is making toward meeting its established goals.

Early Start Goals (August, 2020)

- To provide a hands-on, garden-based, foundation for science learning for PK-5 students
- To support PK-5 teachers in developing the knowledge and pedagogical skills necessary to implement the Next Generation Science Standards (NGSS), State Science Standards, and relevant district-based Science learning goals.
- To assist teachers and school administrators in implementing the tools and strategies necessary to engage students' families in building and supporting their children's science knowledge and skills.
- To directly support students' families in developing their children's engagement and curiosity with science.

Evaluation Questions (August, 2020)

1. To what extent has the Early Start in Science Initiative contributed to the development of foundational science experiences for PK-5 students?
2. To what extent has the Early Start in Science Initiative effectively supported PK-5 teachers in developing knowledge and pedagogical skills related to hands-on, standards-based, science learning?
3. To what extent has the Early Start in Science Initiative helped PK-5 teachers and administrators engage families in supporting students' science knowledge and skills?
4. To what extent has the Early Start in Science Initiative directly supported the families of the PK-5 students involved in the program in developing students' engagement and curiosity around science?

Early Start Initiative Goal	Evaluation Question	Indicators <i>We expect to see (count, hear about, etc.)...</i>	Evaluation Data Sources
<p>PK-5 Student Learning</p> <p>To provide a hands-on, garden-based, foundation for science learning for PK-5 students</p>	<p>To what extent has the Early Start in Science Initiative contributed to the development of foundational science experiences for PK-5 students?</p>	<ul style="list-style-type: none"> • Students are spending time physically in the garden engaged in science-learning. • Students exhibit the science practices (e.g., asking deeper questions, engaged in science content) and foundation knowledge related to their grade-appropriate, standards-based, science curriculum. • Students exhibit a high level of engagement with the curriculum activities and garden-based learning promoted by the informal educational organization and the Early Start in Science Initiative. 	<ul style="list-style-type: none"> • Student and class observation (virtual or f2f, depending on whatever modality is being used in school) • Garden Educator logs and interviews • Teacher interviews/focus groups • Observation and analysis of student work (provided by teachers) • Review of Early Start Curriculum materials • Annual teacher surveys (Early Start schools)
<p>Teacher Knowledge</p> <p>To support PK-5 teachers in developing the knowledge and pedagogical skills necessary to implement the Next Generation Science Standards (NGSS), State Science Standards, and relevant district-based Science learning goals.</p>	<p>To what extent has the Early Start in Science Initiative effectively supported PK-5 teachers in developing knowledge and pedagogical skills related to hands-on, standards-based, science learning?</p>	<ul style="list-style-type: none"> • Teachers implement the various garden-related activities and inquiry science teaching practices they have learned about via the work of the Early Start initiative. • Teachers report confidence being in the garden, discussing the garden in classroom activities, and in understanding the development of their students’ science learning. • Teachers engage with the informal educational organization’s Garden Educator as a collaborator in designing and implementing garden-based curriculum activities. 	<ul style="list-style-type: none"> • Teacher interviews/focus groups • Garden Educator logs and interviews • Class observation • Annual teacher surveys (Early Start schools) • Principal interviews • Professional development observation

<p>Supporting Teachers in Family Engagement</p> <p>To assist teachers and school administrators in developing strategies to engage students' families in building and supporting their children's science knowledge and skills.</p>	<p>To what extent has the Early Start in Science Initiative helped PK-5 teachers and administrators engage families in supporting students' science knowledge and skills?</p>	<ul style="list-style-type: none"> ● Teachers are comfortable describing and actively communicating (sharing information) with parents about garden-based learning/science activities as being integral to their children's education. ● Schools identify the organization and its curriculum in their comprehensive school plans as being integral to achieving their student learning goals and communicate this connection to families. 	<ul style="list-style-type: none"> ● Teacher interviews ● Principal interviews ● Review of school communication to parents about the informal educational organization ● Review of school plans ● Family focus groups ● Family survey (Early Start classroom families)
<p>Directly Supporting Engagement of Students' Families</p> <p>To directly support students' families in developing their children's engagement and curiosity with science.</p>	<p>To what extent has the Early Start in Science Initiative directly supported the families of the PK-5 students involved in the program in developing students' engagement and curiosity around science?</p>	<ul style="list-style-type: none"> ● The organization has developed a strategic approach for communicating information on the role of the initiative in science learning. ● In line with its strategic approach, the organization has developed and is using targeted communications and activities for parents and families in Early Start schools. ● Families (parents) recognize and identify the connection between the Early Start curriculum activities and their students' knowledge of science and allied subjects such as health and well-being. 	<ul style="list-style-type: none"> ● Review of organization's strategic communications plan ● Interviews with organization's staff ● Teacher interviews ● Principal interviews ● Review of organization's communication to parents ● Family focus groups ● Family survey (Early Start classroom families)