

Leap into Science Cohort One: Formative Evaluation Executive Summary January 2019

Overview

In preparation for the next Leap into Science cohort and the upcoming 2019 National Leadership Institute, EDC compiled and analyzed the formative data related to cohort one's dissemination of Leap into Science. The purpose of this report is to document areas of success for cohort one and to offer suggestions for improving the program going forward. This report is based on three sources of data including: 1) Educator post-training surveys, 2) Educator training observations, and 3) Cohort one state leader focus groups. Highlights from each of these three methods can be found in this executive summary.

Data collection methods

The following three data collection methods were used to synthesize the information for this report:

Method 1: Educator post-training survey: Representatives from the National Girls Collaborative Project (NGCP) administered the online educator post-training survey to educators who attended trainings via an email to attendees in the days following their training. In total, 157 educators responded to the survey between May 16 and November 16, 2018 for an approximate response rate of 40%¹. During this period, all six cohort one states (i.e., Arizona, New Jersey, Oregon, Tennessee, Washington, and West Virginia) held at least two trainings. Results from this survey are summarized below.

Method 2: Educator training observations: Members of the EDC team observed five cohort one educator trainings (i.e., one training in five of the six states in which Leap is being disseminated). The goal of the observations was to measure the fidelity of the educator trainings. Observations were conducted using the Fidelity of Implementation: Observation Rubric developed in collaboration with the Leap team. The rubric includes four sections: 1) Parts of the training, 2) Essential Elements, 3) Leap "Core Four" Strategies, and 4) Flexible Elements. Additionally, evaluators reflected on each of the trainings following their observations. Results from the observations are summarized below.

Method 3: Cohort one state leader focus groups: EDC conducted focus groups with state leaders from the six states who were part of Leap into Science cohort one. Focus groups took place between November 27 and December 5, 2018. All representatives from state leader teams were invited to participate in their state's focus group via WebEx. If team members could not make the scheduled focus group, individuals were encouraged to send feedback to EDC via email. Results from the focus groups are summarized below.

¹ This response rate is approximate as it is not clear the exact number of educators who took trainings during this time period.

Result highlights: Educator post-training survey

Overarching highlights from the educator survey results are as follows:

Reactions to the training

- The majority of respondents found the training to be very or extremely valuable (87%).
- The majority respondents found the level of information at their training to be “just right” (88%) as well as the length of the training (75%).
- The most valuable training experience indicated was practicing the Core Four (91% very/extremely valuable) and the least valuable training experience was learning about the goals and history of Leap into Science (36% somewhat/slightly valuable).
- Most respondents (at least 65%) thought the trainers encouraged active participation, were comfortable, and appeared prepared.
- Over two-thirds of respondents had never heard of The Franklin Institute or had heard of it, but didn’t know much about it (67%).

Knowledge and confidence following the training

- Respondents largely indicated understanding expectations to lead workshops and understanding the goals of workshops (at least 94% agree/strongly agree).
- There was a 21% increase in respondents who felt very or extremely confident leading literacy activities with children and families.
- There was a 42% increase in respondents who felt very or extremely confident leading science activities with children and families.
- The element of implementation most likely to pose a challenge for respondents was participating in quarterly calls (41%).

Open-ended responses

- Respondents reported being most excited about facilitating the curriculum.
- Respondents suggested both shortening and lengthening the training and providing more detail on the Core Four.
- Respondents asked a variety of questions on materials and scheduling, among several other topics.

Result highlights: Educator training observations

Overarching highlights from the results are as follows:

Adherence to specific parts of the training

- Overall, trainings were implemented with fidelity.
- Training components were implemented as intended in at least 80% of the trainings observed except for the “Expectations” portion in which slightly more variation was observed.
- While all trainers covered the slides in the “Expectation” section, trainers in two of the trainings covered this section with limited detail or with minimal answers to participant questions.

Adherence to the Essential Elements

- Overall, the majority of the Essential Elements were addressed through the trainings.
- Variation occurred primarily in some logistical aspects (e.g., number of attendees, length of the training) and in trainers advance preparation for the session.
- Trainers were less consistent in building in opportunities for participants to network. The networking activity and the introductions were the primary structured opportunities for networking. Even with these pieces, opportunities to make connections across organizations seemed limited or superficial in several trainings observed.

Use of the Core Four Strategies

- Overall, trainers actively included the Core Four strategies within their trainings.
- In general, trainers across the sessions observed implemented “asking questions” and “encouraging participants to think scientifically” consistently throughout the training activities. In some trainings, instances of “cultivating rich dialogue” and “making connections” were observed less often.
- Asking questions was the most common strategy observed across the trainings.
- Further clarification regarding how the four strategies are different from each other emerged.

Implementation of the Flexible Elements

- Overall, trainers remained relatively consistent in their implementation of the trainings.
- Few trainers adapted the trainings by modifying the PowerPoint or adding training components, extra slides, or additional videos.
- The majority of the trainers provided ample time for participants to ask questions and collected an exit slip at the end of the training.
- Trainings varied on the amount of time they allowed participants to plan for their own implementation or to network beyond engaging in the networking activity and doing the workshop activities together.

Post site visit observer reflections

- Overall, participant engagement was high across the five trainings observed.
- The two key areas of confusion included logistics/expectations and implementing the Core Four.
- Participants had numerous logistical and facilitation related questions during the training. Trainers tended to have answers for the majority of the questions asked.
- Based on the trainings observed, several suggestions for improvement emerged related to the training additions/revisions, facilitation and networking, and logistics.

Result highlights: Cohort one state leader focus groups

Overarching highlights from the results are as follows:

Motivations to apply to Leap into Science

- State leaders reported various motivations for applying to be a part of Leap including benefits at the national, state, organizational, staff, and family levels.
- Several state leaders also expressed excitement about the science and literacy content of the program.

Leap into Science dissemination

- Overall, state leaders reported feeling comfortable disseminating the curriculum and indicated that trainings are easy to facilitate due to how they are laid out.
- State leaders felt that educators found value in learning by doing and had fun during the trainings.
- Several state teams indicated that team members co-led trainings when possible.
- State leaders indicated that many educators had not yet hosted workshops to their knowledge.
- At the same time, several state teams expressed that it was not easy to track which educators had implemented and so they did not have a good sense of how educator implementation was going.
- Some state leaders had not yet conducted quarterly calls at the time of the focus groups.
- For teams that had conducted monthly calls, they reported that educators have been relatively quiet because many have not yet conducted workshops.

Successes and challenges with disseminating Leap into Science

- State leaders reported several successes in their dissemination of Leap into Science to date including opportunities for educators to network within Leap and beyond Leap, spreading the curriculum, building educator skills, and distributing programmatic resources.
- At the same time, educators express several challenges including navigating the multiple technology platforms, ensuring that their educators were following thru on their Leap commitments, getting access to programmatic and evaluation data for their states, and kit transportation and distribution.

Collaboration within state teams

- Overall, state team members speak highly of each other and expressed they are excited to collaborate with their state team.
- In some instances, state leaders report that their organizations are excited about partnering with other organizations within their state. In other cases, members from the same organization that were in distant parts of the state had the ability to connect through Leap.
- State leaders have shaped their collaborations in various ways commonly with a variety of roles taken on by each team member. Possible roles include: trainer, organizer/manager, community/recruitment specialist, quarterly call leader, and financial manager.
- Collaboration strategies used among state teams included Google Drive, email, and strategically scheduling team meetings before or after national calls.

Defining “underserved” audiences

- State leadership teams have chosen to define “underserved” audiences in a variety of ways.
- Communities targeted have been based on geographic location, primary languages spoken, perceived access to resources and programs such as Leap, and income level.
- State leaders have primarily accessed their target communities in this first year through their already developed networks.

Ownership of Leap into Science

- Overall, state leaders report making few adaptations to the logistics of planning a training and to the training content itself.
- Most state teams believe that while they could do some of the trainings on their own, the additional supports provided by NGCP and The Franklin Institute have allowed them to implement this year.

Suggestions for improvement

In terms of suggestions for the Leap National team, ideas included:

- Link or consolidate the websites that both they and their educators have to access to create a more seamless experience.
- Ensure websites, emails, and the educator forum, etc., are up and running closer to when state leads run trainings as the lag time can allow educators to drop off.
- Give people training beyond the curriculum (e.g., offer supplemental training on how trained educators can develop their own programs).
- Release more curriculum and/or offer a sneak peak of the upcoming curriculum during educator trainings.
- Incorporate books that are more up to date or books from more diverse publishers.
- Provide state leaders with access to more programmatic data on how the program is being implemented by their educators and evaluation data related to their states.
- Shorten gap between state leader training and when educator trainings occur.
- Clarify steps of receiving invitations, logins, etc., to state leads.
- Provide a way for state leadership teams to house their information and planning in one place.
- Provide additional funding for state lead kit supplies.
- Consider more sustainable kit packaging.
- Elect a state leader from each state who’s the official “lead” and perhaps gets an extra stipend.