

FRESHFARM FoodPrints
Spring 2020
Distance Learning
Process Evaluation

July 2020

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Acknowledgments

This research could not have been completed without the willingness of FoodPrints teachers, classroom teachers, and parents to share their experiences with the FoodPrints distance learning program. In a context where a lot is being asked of teachers and parents, as they try to balance work, caregiving responsibilities, and taking care of their own health during a pandemic, I appreciate the time they generously gave to this study. This research could also not have been completed without the willingness of the FRESHFARM FoodPrints program to build research and a culture of learning into its programming and to have built such strong relationships with its partner schools. I also appreciate the funding that supported this research, including from DC Public Schools and DC Health.

Dedication

In May 2020, FoodPrints lost a teacher, friend, and colleague, Shana Donahue. Shana taught FoodPrints at Simon Elementary and, at the time of her death, was also assisting with food distribution at Kimball Elementary. I knew Shana through my evaluation work with FoodPrints over the past several years, and I know that she would have had a lot to contribute to an interview about distance learning.

Based on our previous conversations, I imagine that she would have talked about her connections to her students, how hard she was working to provide distance learning that was accessible to as many students as possible, moments of joy and learning that her students were experiencing, and her ideas about how to make FoodPrints distance learning more equitable and accessible to students at her school. And as a result of that interview, I imagine that there would be even more vivid examples in this report of what students were learning and experiencing through her distance learning classes and how she was creatively adapting her teaching to reach as many students as possible.

In addition to being a skilled and caring FoodPrints teacher, Shana was a helpful thought partner for me as I engaged in research with FoodPrints. She pushed me to make the research I was designing as accessible and relevant as possible for her students and would also generously find ways to adapt what I had planned to the context she was working in. I miss her presence and her feedback and have tried to honor both in writing this report.

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Executive Summary

In March 2020, in response to school closures due to the COVID-19 pandemic, the FRESHFARM FoodPrints program adapted its programming to serve students in their homes. FoodPrints provided multiple ways for students and families to engage in programming via distance learning, including:

- FoodPrints Anywhere:** From April 3 through May 28, FoodPrints provided weekly extension activities for families to complete at home via its website: <https://www.freshfarm.org/foodprints/foodprints-anywhere>. These extension activities included nutrition education, food and garden activities, and opportunities integrate academic learning. For example, the first FoodPrints Anywhere post included a video from FoodPrints teachers showing what they had been cooking and gardening at home, activities to encourage students to “Eat the Rainbow,” a Salad Dressing challenge that integrated math learning about ratios with recipes for making salad dressing at home, a virtual tour of a FoodPrints school garden, and a lesson about how to use common household items to grow seeds at home.
- School-Based Distance Learning Classes and Resources:** FoodPrints teachers also provided synchronous (live) distance learning classes and/or asynchronous classes and resources (e.g., recorded classes, extension activities provided via newsletters and emails) to students at their schools. Teachers worked to adapt the types of distance learning they provided to the context of distance learning at their partner school and to the availability of resources that families had at home. Table 1 details the types of distance learning activities that were provided to students at 12 FoodPrints partner schools.

School	Date	Type of Distance Learning	Number Provided
Anne Beers Elementary	April 17-May 15	Asynchronous (pre-recorded videos and posts)	5 recorded videos 1 post
		Synchronous (live classes)	2 live classes
Burroughs Elementary	April 3-May 14	Synchronous (live classes)	2 live classes
C.W. Harris Elementary	April 17-May 22	Synchronous (live classes)	6 live classes
Garfield Elementary	May 7-22	Asynchronous (pre-recorded videos and emails)	3 recorded videos 1 email
Kimball Elementary	April 23-May 29	Synchronous (live classes)	27 live classes
Lafayette Elementary	April 6-May 28	Asynchronous (pre-recorded videos and posts)	12 recorded videos 7 posts
		Synchronous (live classes)	27 live classes
Langley Elementary	May 8-22	Asynchronous (pre-recorded videos)	7 recorded videos
Ludlow Taylor Elementary	May 22-28	Synchronous (live classes)	4 live classes
Marie Reed Elementary	May 1-29	Asynchronous (newsletter)	5 newsletters
Peabody Elementary	April 23-May 22	Asynchronous (pre-recorded videos)	14 recorded videos
		Synchronous (live classes)	8 live classes
School Within School	April 17-May 26	Synchronous (live classes)	22 live classes

School Without Walls Francis Stevens	March 19-April 30	Synchronous (live classes)	13 live classes
Tyler Elementary	April 27-May 26	Asynchronous (pre- recorded videos)	5 recorded videos
		Synchronous (live classes)	3 live classes
Watkins Elementary	April 16-May 22	Asynchronous (pre- recorded videos and email)	3 recorded videos 1 email
		Synchronous (live classes)	5 live classes

This process evaluation examines the creation and implementation of FoodPrints distance learning activities from the perspectives of three groups: FoodPrints teachers, classroom teachers at FoodPrints partner schools, and parents of FoodPrints students. Data were collected in the following ways:

- In May and June 2020, family members of FoodPrints students were asked to complete a brief online survey about their experiences with FoodPrints distance learning. From May 17 to June 5, FoodPrints received 93 responses from family members. These responses were downloaded into an Excel document and frequencies were calculated to assess the proportion of families who engaged and benefited from distance learning activities.
- In May and June 2020, classroom teachers at FoodPrints partner schools were invited to participate in a brief online survey about their experiences with FoodPrints distance learning. From May 27 to June 24, FoodPrints received 101 responses from classroom teachers at 13 FoodPrints partner schools. Data were downloaded into an Excel document and frequencies were calculated to assess the proportion of teachers who engaged and benefited from distance learning activities.
- In June 2020, 11 FoodPrints teachers participated in interviews about their experiences providing distance learning education at 10 schools. Teachers were asked to describe how they created their distance learning education, what they found worked, what they found to be challenging, and what types of learning and engagement they saw from students and families. Interviews ranged from 19 to 46 minutes and were recorded and transcribed for analysis. Interview transcripts were loaded into NVIVO 12.0 for analysis. Interview data were coded using an open and focused coding process; 10 themes and 64 subthemes were developed during the open coding process and were used to code the data during the focused coding process. Themes included creating an adaptable structure for online learning, challenges, family engagement, family learning, student engagement, student learning, social emotional learning, and “what worked.”

An analysis of data from these research activities demonstrates:

- FoodPrints teachers designed flexible, adaptable classes that reached students and their families in a variety of ways and were valued by families and their school communities.
- FoodPrints classes allowed students to continue their garden and food education during distance learning and to discover that they could transfer these skills to their homes. In turn, FoodPrints teachers observed instances of distance learning fostering a sense of pride, confidence, and self-efficacy in students.

- FoodPrints teachers observed an increase in parent involvement in live virtual classes. In some cases, parent engagement translated into parents enjoying cooking activities with their children and gaining a new perspective on their children’s skills and capacities. In surveys, parents reported multiple benefits from engaging in FoodPrints distance learning, including helping them cook together as a family, think creatively about how to use what they have at home in recipes, and incorporate more fruits and vegetables into their diet.
- Most classroom teachers who participated in FoodPrints live virtual classes shared that the classes helped their students by promoting health through food education (93 percent); engaging students in interactive activities (87 percent); supporting social emotional learning (81 percent); and providing educational opportunities in science, literacy, math, art, garden, and/or environmental education (78 percent).
- Inequalities in access to distance learning were observed in the DCPS general education distance learning program and also existed in FoodPrints virtual live classes. Challenges related to technology and food access limited some students’ ability to participate in live classes. Within this context, FoodPrints teachers designed their lessons with accessibility in mind and found that “keeping it simple” – offering lots of flexibility in ingredients, celebrating the different ingredients that students brought to the table, and providing advance notice about recipes and ingredients – helped them to grow and sustain engagement in virtual cooking lessons.

Design, Implementation, and Outcomes from FoodPrints Distance Learning: Interviews with FoodPrints Teachers

In June 2020, eleven FoodPrints teachers participated in interviews about their experiences providing distance learning education at 10 schools. Teachers were asked to describe how they created their distance learning education, what they found worked and what they found to be challenging, and what types of learning and engagement they saw from students and families. Interviews ranged from 19 to 46 minutes in duration and were recorded and transcribed for analysis. Analysis was completed using an open and focused coding process; 10 themes and 64 subthemes were developed during the open coding process and were used to code the data during the focused coding process. Themes included creating an adaptable structure for online learning, challenges, family engagement, family learning, student engagement, student learning, social emotional learning, and what worked.

Results from the qualitative analysis demonstrate that FoodPrints teachers and staff designed flexible, adaptable distance learning classes and resources that reached DCPS students and their families in a variety of ways. FoodPrints distance learning allowed participating students to continue their garden and food education at home, using materials they had available, and to discover that FoodPrints activities could transfer to their homes. In turn, FoodPrints teachers observed distance learning activities fostering a sense of pride, confidence, and self-efficacy among students. FoodPrints teachers observed an increase in parent involvement in distance learning classes, and in some cases, parent engagement translated into parents enjoying cooking activities with their children and gaining a new perspective on their children's skills and capacities. Challenges in program development and implementation generally related to coordinating logistics of distance learning with schools, setting up and managing technology at home, and adapting programming to be accessible to as many students as possible. Teachers found that "keeping it simple," offering lots of flexibility in ingredients, celebrating the different ingredients that students brought to the table, and providing advance notice about recipes and ingredients, could help foster engagement among students and families.

Establishing Distance Learning Classes and Resources

FoodPrints distance learning classes emerged in response to school closures due to the COVID-19 pandemic during a time of significant uncertainty. Similar to school closures nationwide, the DC Mayor's and DC Public Schools (DCPS) Chancellor's decision to close schools was made to prioritize student health and safety and, thus occurred quickly before academic distance learning plans had been created. DCPS school closures began on March 16, and DCPS teachers and staff were asked report to school the same day to plan for distance learning. DCPS moved its spring break up to March 17-23 to allow for additional distance learning planning, and distance learning began on March 24.¹ DCPS initially planned to resume in-person learning in April but ultimately decided, when Coronavirus cases increased significantly, to close schools for the remainder of the year and to end the school year three weeks early on May 29.

¹ DC Public Schools. 2020. "Coronavirus (COVID-19) Family and Community FAQ." https://dcps.dc.gov/sites/default/files/dc/sites/dcps/page_content/attachments/Family-and-Community-Frequently-Asked-Questions-revised-040820.pdf.

While DCPS teachers planned for distance learning, FoodPrints staff and teachers came together to discuss how to adapt FoodPrints school-based learning so that it could continue to be accessible to students during distance learning. In March, FoodPrints created an online learning platform called FoodPrints Anywhere to provide opportunities for students and families to engage in cooking, gardening, and environmental education activities integrated with academic learning while at home. FoodPrints teachers and staff also created a video of the cooking and gardening activities they were participating in at home to provide a way for students to continue to connect with FoodPrints.

During this time, FoodPrints teachers also reached out individually to administrators and classroom teachers at their schools to find out how they could integrate FoodPrints into schools' distance learning activities. Teachers adapted the type of distance learning they designed to respond to their school's context. The distance learning activities that FoodPrints teachers created in partnership with their schools generally included at least one of the following: live virtual classes, asynchronous (pre-recorded) classes, or emails/newsletters to teachers and families. Teachers logged the type of distance learning provided on a tracking form, and Table 1 provides a brief description of the type and amount of distance learning classes provided at 12 FoodPrints partner schools.

Table 1: Type and Amount of Distance Learning Education Provided to FoodPrints Partner Schools			
School	Date	Type of Distance Learning	Number Provided
Anne Beers Elementary	April 17-May 15	Asynchronous (pre-recorded videos and posts)	5 recorded videos 1 post
		Synchronous (live classes)	2 live classes
Burroughs Elementary	April 3-May 14	Synchronous (live classes)	2 live classes
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Through creatively responding to a challenging context, FoodPrints teachers found ways to make FoodPrints lessons relevant and accessible to their school communities and to provide a continuity of learning to students and their families who were able to access these resources. Below, teachers discuss the types of learning and engagement they observed from students and parents through these activities.

Student Engagement in Distance Learning Classes

Engagement in Gardening Activities

During in-person FoodPrints classes, students spend time in their school garden planting seeds, watching plants grow, and harvesting what they have grown. With the transition to in-home learning, FoodPrints teachers experimented with ways to connect students to garden education, whether it was through sharing updates about the school garden in pre-recorded videos, engaging students in planting their own seeds at home in live classes, or providing families with a plant from the school garden to care for at home.

At one school, FoodPrints teachers incorporated garden education into their live classes by teaching students how to build terrariums and how to plant seeds at home:

Well, I most definitely know in the gardening area, they loved – we made terrariums, and we also did plantings where all we needed was a seed, a paper towel, and some water in a plastic bag. And they got to hang them up in the windows and watch them grow from a seed to a sprout to a plant. And we talked about the roots and some of them were worried about the roots being stuck to the paper towel, and we said, “You can plant it just like that.”

FoodPrints teachers at this school also talked about the excitement they saw as students were able to share their at-home experiences with gardening and the environment with their teachers and fellow students:

We had children taking their computers outside to show us things that were growing in their garden. We also had children, when we were doing projects, and they forgot to go get the ingredients that they needed like soil or rocks or whatever, they took us on a tour. They took us outside with them, and they collected rocks and sand and dirt and brought it all back into the house and put together whatever project we were working on.

And like my partner said, one of the girls went outside with one of her, with the cell phone and took us on a tour. And she found a worm, and she was digging up things outside, and she was so excited. And then in one class, we had a child showing us a plant that her, the grandmother, was growing. And then that just created a tsunami. They were all like, “Here’s what we’re growing!” “Here’s what we’re growing!” Just this excitement. “Look what we have!”

At another school, where the school garden will be undergoing construction in January 2021, the FoodPrints teacher potted 300 plants so that each student could have a piece of the school garden while they were away from school:

Right before the school closed, when parents were still coming in to pick up packages of like learning packets...I was in the garden one day, just before it happened. I was in the garden, and a Mom was going by with her son, and he was just falling apart. And I said, I think he was in kindergarten, and I said to them, "Would you want to plant?" I had been potting up mint. "Do you want a mint plant?" And he was very happy take his mint plant home. And later on, she [the mother] wrote to me and said, "You have no idea how much we needed that." And again, the next day, sent me another picture of him making some type of mint smoothie.



And so that inspired me and I potted up 300 plants. When parents came to pick up their [learning] packets, they also had a plant to take home to their child. Because when I wrote to the parents, I can't remember passwords, I'm obviously forgetting things on calendars, but I do remember every plant that ever has been given to me. And I just thought it could be really nice for kids to have a piece of their school garden home with them during this time. And the principal felt that if it wasn't for those plants, parents probably would have not come to pick up those [learning] packets.

Since distributing the plants, the FoodPrints teacher has heard from many families about how students are caring for and enjoying their plants:

I've got many pictures of them harvesting. Some of them were strawberries, some of them were mint...I've had people stop all the time and tell me that their plants are growing well. And then somebody else wrote that they now have three trees and a couple of blueberry bushes and you know quite a few families have written back and sent pictures from that.

Student Engagement in Cooking and Food Education Activities

During in-person FoodPrints classes, students prepare and eat a meal together. Students learn knife skills that they apply to chopping fruits and vegetables, apply their knowledge of fractions to measure ingredients, and practice teamwork as they work in small groups to execute a portion of the meal. In FoodPrints in-person classes, all ingredients for the shared meal are provided by harvesting fruits and vegetables from the school garden, supplemented by ingredients and supplies that FoodPrints provides for the class.

With the transition to distance learning, FoodPrints teachers were faced with several challenges in how to adapt cooking and food education for in-home learning. The first was the accessibility of ingredients and cooking tools. Without knowing what ingredients and cooking tools households would have on hand and knowing that there would be disparities in students' access to food and kitchen supplies, FoodPrints teachers adapted recipes to, in their words, "keep it simple." "Keeping it simple" meant using minimal ingredients and encouraging and providing ideas for ingredient substitutions.

We just tried to do really simple things. So, the first week we did open-faced toast. So, the list of ingredients you would need was some type of bread – English muffin is fine, tortilla is fine, actual bread is fine, rice cake is fine – whatever you eat. Something to spread, something to put on top. So, I tried to leave every week really open and flexible so nobody felt like they couldn't participate.

I had them make things that were simple... I gave a lot of options. And basically, anything that you can find in your house so that you can improvise. Everybody's output was different but it would be accessible. But in the end, all of us, both teachers, the classroom teachers, every student who was participating, produced something that then we could all eat together.

Teachers also worked to provide students and their families with advance notice about needed ingredients for live cooking sessions so families would have enough time to assemble materials:

I sent an email to the teachers to ask them to send to the parents and I said basically we're going to talk about eating the rainbow. It would be super-fun if the virtual class had a rainbow bowl, a bowl of different colored fruits and vegetables. I made sure that people knew that I know food is really tricky right now for many people so you can pick just one fruit and vegetable, totally fine, just colors in them. And then I also said, you know, if your first grader wants to put candy in the bowl, don't fight it. It's all good. So, they all came to class knowing that we were going to talk about rainbow bowls and share them.

Once I scheduled with the teacher a time that would work for them in their class in a one-hour block, we would pick a recipe. And a week before our class, I would send a very specific equipment and ingredients list, and try to include a lot of substitutions or note which things were optional amongst the ingredients and any pieces of equipment. So, that seemed to be, it seemed to work reasonably well.

So basically, on Monday and Tuesday, I would make a post on our Class Dojo, which is kind of like Instagram but for teachers to talk to the parents, and I would tell them the equipment that they needed, substitutions that would work.



In one case, a FoodPrints teacher provided deliveries of difficult-to-access ingredients, such as yeast, to families:

When we made pizza, I told them, you know, “Yeast is sometimes hard to find, especially during the pandemic when everyone is baking like crazy. If you need me to bring yeast to your house, I will do that.” And parents actually hit me up like, “Oh yeah, can you bring me some yeast and flour?” [And I said,] “Of course.”

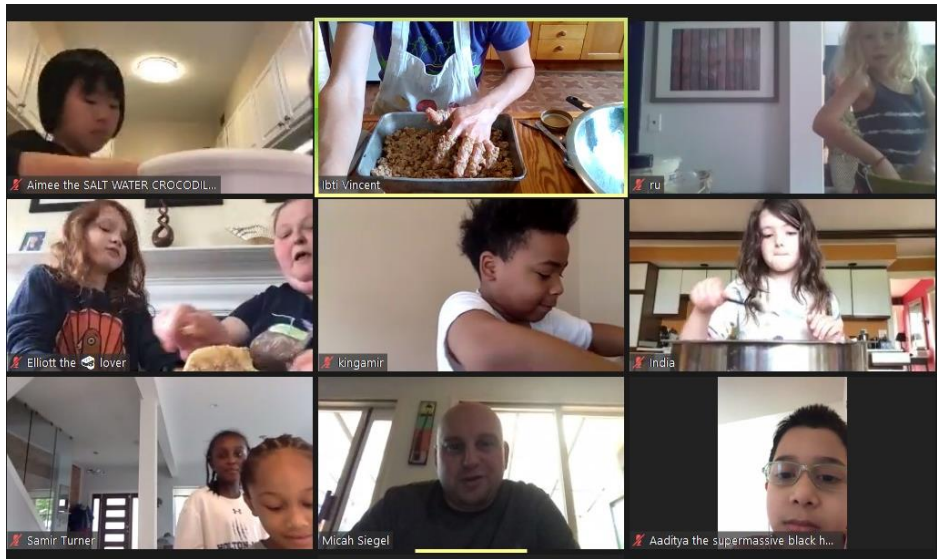
FoodPrints teachers also adapted recipes and activities to accommodate as many variations of foods as possible and built in time to celebrate the differences on students’ plates.

I had a big bowl of fruits and vegetables at my house of all different colors and I would like show each one to them and explain like the health benefits that come from eating that color. The cool thing that started happening was when I held up a red apple and started talking about red, they would all hold up their red fruits and vegetables. And then we would all put it back. I didn’t even ask. That was kind of cool. And then after that, I showed them my rainbow bowl that I made. And we went around, and each child got to share their rainbow bowl that they had made for class. And then we took a bite together...

I thought it was wonderful because [my co-lead teacher] could be cooking with what she had at home, and I could be in my house cooking with what I had. And I would try to make sure that it was something that they [the students] would have in their pantry or in their refrigerator, so they wouldn’t feel left out. So, [my co-lead teacher] had all the vegetables, and I might have the fruit. Or we might combine different things. I might have peaches and pears, or peaches and plums, and she might be doing grapes and bananas or something like that. And so, it just really worked out.

And everybody’s looked different, and we celebrated that differentness, those differences, we all celebrated. We would ooh and ah over what everybody made. Everybody could show it, and I think that was one of the most exciting, really the most beautiful parts of it was the celebration of that you can make something from whatever you find in your kitchen.





Family Engagement in Cooking and Food Education Activities

One of the unexpected benefits that many FoodPrints teachers discussed was the increased engagement they saw from students' family members in FoodPrints distance learning activities:

I would say one of the best parts of this being online teaching was that we had access to parents. Especially for the younger classes, a parent would always be on with the kids. And we would have parents there who may not – at our school, we don't get a lot of parent volunteers. We've had a few trickle in, and we see parents now every now and then. But for us to see online teaching – we saw so many parents, we had interactions with so many parents...Parents were seeing how much their kids loved FoodPrints and all the things that we were doing. And we could see in classes we taught week after week that the same parents kept coming back. The kids would keep coming back and the parents would keep coming back and it was like, "Ah! We've got the parents now. They really are enjoying it." Some parents were enjoying it more than the kids. That was such, if there's any plus to this and having to go online, it's that we made a connection to the parents, and it was really fabulous. For me, that was such a great thing and teaching all the online classes that we got to connect with parents.

Most of these parents have not had the time to come volunteer with FoodPrints because they're at work but now that everything is at home, they're finally getting a chance to see their kids in action.

Family engagement took many forms from participation in virtual classes to commenting on FoodPrints' teachers pre-recorded videos to creating their own FoodPrints Days at home:

Some 4th and 5th grade classes where I could see or tell that there is a parent kind of in the background, moving around, keeping an eye on, and I would even tell the students, "Hey, this is a great task for your assistant because remember you're the head cook right now. So, remember to be polite and kind but you also need to give clear instructions to your parent or older brother, whoever is over at the stove."...I think all of the sessions there have been some

parents involved... in the vast majority of instances, I would say half of the households had at least one adult in the room.

I would get messages from teachers on...Class Dojo. They would leave a comment saying, "This is great!" and like "We miss you!" And some parents would shoot like a thumbs up or "This is great." I really, the only gauge I was able to get was from the amount of likes that I received, which on a couple of them was over 50 and viewed pretty often.

They definitely enjoyed what I was able to offer...I posted a weekly video, and one week I didn't because I just had so much going on that week. And they were like, "We missed it! We missed the video. Did I miss the upload I mean, the link?" And I was like, "No, I just didn't post the video this week but I'm going to try to double-up next week." I definitely received good feedback [from parents].

Families [at our school] are having their own FoodPrints Days at home. I think a lot of families are doing FoodPrints Days. Kids are really missing school, and I think that they're having these FoodPrints Days as a way to connect.

Teachers who taught virtual classes described the benefits they saw from increasing parent engagement, including cooking being experienced as more accessible and empowering and parents being able to see their children's skills and talents in action:

I think the biggest piece of learning I saw was that people started to realize that cooking isn't always this strict and stressful thing and that there's a lot of leeway and a lot of room to freestyle. And I think that because we didn't, the only time we followed a recipe through and through was for making pizza dough because you know, baking is more of a science than anything else. And so, I think that parents, parents and students, started to see oh, if you don't have something, you can easily substitute it. I feel they became more empowered cooking at home.

And then also, parents got to see their kids in a new light, and this is what I love about FoodPrints in general. Academic classes don't cater to everybody. If you don't like to sit still, if you can't focus for more than 5 minutes, if you're bad at math, you might be deemed a bad kid. But in FoodPrints, there's so many opportunities to show that you have skills in different ways, and it was really nice...Some quote unquote "bad kids" parents emailed me and "Oh, my son is so engaged. This is so nice." And I told them "Oh, he's a great helper. He's one of my best little chefs." And just like helping parents feel better about their kids being a different type of learner was also really cool.

I had a few parents email me afterwards and say, "Thank you for introducing the idea that my seven-year-old can help wash dishes. Like, now they're asking to help. I didn't think that was something that was even appropriate to ask them." I was like, "Well, I mean, see what they can do. Frame it as this is what you know. This is how grown-ups do things. This is how chefs and cooks do things. And they're like well, I can do that. I can help with things."

The parents a lot of times were learning that their students are so much more capable than we give them credit for. So, people would say, "Oh, should I come to the lesson with everything pre-chopped?" I'm like, "No, you should have your kid chop it. You can chop it together." So just like

showing parents that kids are really capable and then having the kids be able to say, “Oh yeah, I learned this. I know how to do this.” I think everybody was just feeling so much more confident in their abilities.

Social and Emotional Learning in Distance Learning Classes

Teachers shared examples of the social and emotional learning they observed or heard about unfolding as students engaged in distance learning activities. One common theme from teachers who facilitated virtual classes was the pride that they saw students experiencing when they cooked for themselves and their families at home:

It was also really exciting to see kids cooking for their families. And the way that I would frame it is today, first graders make lunch for their family. Or kindergarteners make dinner for their family. Or making a bunch of granola that folks can eat for, you know, two weeks for breakfast...Kids are feeding their families. Like, how awesome is that? And they were really proud.

The kids were happy and excited, and so sometimes they would just want to talk about what they were eating or what they had made because they were just so proud of themselves. I guess a sense of accomplishment, a sense of pride. It was really nice, and we even had some parents who were right beside them making their own thing as well. And teachers. It was nice.



Teachers also described seeing students cultivate self-efficacy and confidence as they found they could cook and garden with materials they had available at home and felt comfortable reaching out to their FoodPrints teacher with questions:

I think that was one of the most exciting, really the most beautiful parts of it was the celebration of that you can make something from whatever you find in your kitchen. And the kids felt such self-efficacy and they felt so accomplished in making something and showing it. And they did it themselves.

I’ve had, one child wrote to me asking – well, actually two were asking questions about plants and needing advice. And they’re both fifth graders...I just saw the one girl’s mom today. And I just said I thought it was great. One, having that the sense of confidence in feeling connected enough to me to be able to reach out directly and send me an email: I have a question for you. That, that is fabulous. To have that at fifth grade.

FoodPrints teachers also shared examples of how distance learning classes helped students maintain connections to their school and to FoodPrints teachers:

I know [a teacher], who is a PreK3 teacher, either PreK3 or PreK4, was saying that he and the students really appreciated getting the garden updates and watching the progress. And it was really exciting for the kids to feel like they were more actively part of it and still connected to the school.

What I kind of realized early on is that for a lot of students, this was just like a nice diversion from for them of the world being very scary right now. They really just wanted to hang out with me in my kitchen or video and watch me cook stuff and just have a nice time...They were looking to have fun and FoodPrints was kind of like a break for them from very like uncertain precarious situation.

Promotion of Eating Fresh Fruit and Vegetables

FoodPrints distance learning provided opportunities – through live virtual classes, pre-recorded videos, and newsletters with recipes – for parents and students to cook together using ingredients they had available. As one FoodPrints teacher learned, one possible outcome of these opportunities was the chance for students to incorporate fresh fruits and vegetables into foods they were preparing and for parents to see their children making choices to eat fruits and vegetables:

We did like rainbow bowls. We did freestyle salads. We did open-faced toast. Fried rice. And I would say little things like “Oh, when I make fried rice, I always like to add something green. I want a pop of color.” And I had a mom email me and follow up and say, “We were making our fried rice, and it was so simple. And then when you said, ‘I want to add something green,’ my son put in peas and broccoli, and that’s not something that we would normally do.” So, I think like because during the school year, parents always say, “How did you get my kids to eat that?” And I always say, “They made it themselves.” So, I think that connection was really seen where the parents were like, “Oh yeah, he wouldn’t eat his salad with me but since we made it together, he did eat it”. And so, I think that connection piece was like finally there. Where the parents were seeing oh, it’s because I make all the decisions that my kid is always fighting me. But when we make the decisions together, then everything works better. Some people said like, “Oh, I don’t normally put veggies on my pizza.” But then they have nice pizzas with spinach and peppers and onions and mushrooms and stuff versus just the classic pepperoni and cheese or something.

Challenges and Recommendations

As FoodPrints teachers discussed their experiences with distance learning, they shared the challenges that they faced in adapting to the distance learning environment at their schools and trying to make their classes as accessible as possible to students.

When adapting to distance learning environments, teachers described the challenge of coordinating logistics with school personnel who were overwhelmed with the transition to distance learning and the challenge of setting up and managing technology in their homes, which had now become both their home and their workspace:

I think in the spring, like everything was so crazy and like everyone was just trying to do their best to keep instruction going and you know, keep getting students what they needed. And that

came with a lot of challenges, and one of them was not being able to often get a response from students...I feel like all the schools we work in are very enthusiastic about the program that we do and generally are very supportive of it...I feel like maybe just gauging what is realistic for schools and how we can support, that would be really helpful.

I think I would need a better camera set up rather than carrying my laptop back and forth from the counter to the stove. But the connectivity seemed to be reasonably good, at least on my side of things. My home kitchen set-up isn't ideal. But I do have a long counter, so I stacked up a bunch of books so I could have the camera on my laptop like sort of generally in a...not a headshot but from my head down to my waist level so they could see not this headless thing talking to them but also could see what my hands were doing. And then I would tilt it down to show them like "this is how you safely chop an onion or this is what whisking looks like" ...and then tilt it back up so I could watch them do the thing.

There was a lot of pressure. I think people assume that because it's being done from my house this is easy but it's actually harder to make sure you have every single thing you need out and in camera frame and making sure they can see you chopping, can see you talking. Making sure your roommates don't walk by in the background.

I know for me, it was even more challenging for me because I have three kids myself so trying to homeschool and do distance learning was like almost impossible.

What I've learned is you know with the proper preparation of all the materials that I need ahead of time, similar to what a live class would be and also talking in shorter clips and not just – I'm kind of learning the technology and the science behind doing a good pre-recorded video...I would love for it to be as simple and easy as teaching for me is and as intuitive as it is for me but it was like a lot of stop and pause and wait, wait, wait, I didn't like that. I didn't like that. Which is funny because I fumble in class. But for some reason when you have the control of recording and deleting and doing that, the perfectionist comes out.

FoodPrints teachers also discussed challenges related to accessibility. Similar to what was observed across DCPS distance learning, fewer students showed up to FoodPrints distance learning classes than teachers were used to seeing in their in-person classes before school closure:

It was hard knowing that some of the kids who could probably most benefit from hands-on experience cooking and having access to the fruits and vegetables were the ones who I couldn't reach either because of connectivity or having any kind of ingredients to work with. I would offer a lot, a lot of alternatives and try to offer recipes that were super-flexible like fried rice, like, the only two ingredients you need are some sort of soy sauce and some sort of rice type thing...so that was challenging.

And then I guess also just like trying to find ways to make it equitable. Because we know that not everybody has access to computers, or Wi-Fi or hotspots, and just like really thinking about, really thinking about the kids that don't have access and how to make it feel good and right for them and their parents, in a way that nobody feels like oh, man this is my fault. I wish I had the money for a computer. Like no, this is so weird, this is not normal.

Conclusion

FoodPrints teachers and staff responded to the challenge of school closures by designing flexible, adaptable distance learning classes and resources that reached DCPS students and their families in a variety of ways. FoodPrints distance learning allowed participating students to continue their garden and food education at home, using materials they had available, and to discover that FoodPrints activities could transfer to their homes. In turn, FoodPrints teachers observed distance learning activities fostering a sense of pride, confidence, and self-efficacy among students. FoodPrints teachers also observed an increase in parent involvement above what existed during in-person classes before school closure. In some cases, parent engagement translated into parents enjoying cooking activities with their children and gaining a new perspective on their children's skills and capacities. As with any new program, and especially one developed in the midst of a pandemic, teachers encountered challenges. Challenges generally related to coordinating logistics of distance learning with schools, setting up and managing technology at home, and adapting programming to be accessible to as many students as possible. Teachers found that "keeping it simple," – offering lots of flexibility in ingredients, celebrating the different ingredients that students brought to the table, and providing advance notice about recipes and ingredients – could help foster engagement among students and families.

DCPS Teachers Discuss Benefits of FoodPrints Distance Learning and Share their Recommendations for Continued Engagement with FoodPrints in the 2020-21 School Year

In May and June 2020, 101 classroom teachers from 13 FoodPrints partner schools participated in a brief online survey about their experiences with FoodPrints distance learning. Most teachers who responded (65 percent) reported that they had participated in live virtual FoodPrints classes, and 47 percent indicated that they had used FoodPrints Anywhere (asynchronous learning activities). Of the teachers who participated in virtual classes, a large majority stated that the classes helped their students by promoting health through food education (93 percent); engaging students in interactive activities (87 percent); supporting social emotional learning (81 percent); and providing educational opportunities in science, literacy, math, art, garden, and/or environmental education (78 percent). Teachers also provided recommendations related to how FoodPrints can continue to support classroom teachers and students' learning. Teachers' recommendations for program structure reflected a desire for FoodPrints to be better integrated into schools' distance learning programs and schedules so that it could be accessible to more students. Teachers also suggested ways to make cooking lessons more accessible to their students, including providing ingredients and kitchen tools as part of school supply pick-ups.

Who responded to the survey?

Classroom teachers from 13 FoodPrints partner schools responded to the survey. A little over half of the responses were from classroom teachers at four schools: C.W. Harris Elementary, Tyler Elementary, Kimball Elementary, and Lafayette Elementary. Teachers from the following schools also contributed responses: Watkins, Anne Beers, Burroughs, School Within School, Garfield, Marie Reed, Ludlow Taylor, School Without Walls Francis Stevens, and Langley Elementary Schools. A few respondents did not indicate the school where they worked. FoodPrints serves schools in Wards 1, 2, 4, 5, 6, 7, and 8, and responses were received from teachers in schools in each of these Wards.

	School Location (Ward)	Percent (n = 101)
C.W. Harris Elementary	7	18%
Tyler Elementary	6	17%
Kimball Elementary	7	12%
Lafayette Elementary	4	11%
Watkins Elementary	6	8%
Anne Beers Elementary	7	5%
Burroughs Elementary	5	5%
School Within School	6	5%
Garfield Elementary	8	4%
Marie Reed Elementary	1	4%
Ludlow Taylor Elementary	6	3%
School Without Walls Francis Stevens	2	3%
Langley Elementary	5	2%
Unknown	N/A	4%

Participation in Distance Learning

Most of the teachers who responded (65 percent) reported that they had participated in live virtual FoodPrints classes (Table 2). Slightly less than half of classroom teachers indicated that they had used FoodPrints Anywhere resources (asynchronous learning activities) during school closure.

While fewer teachers mentioned using FoodPrints Anywhere resources, these resources reached all 13 schools where teachers responded to the survey. At least one teacher in each school reported using FoodPrints Anywhere resources during school closure. In most schools (9 out of 13), multiple teachers reported using FoodPrints Anywhere.

	Percent (n = 101)
Live Virtual Classes	
Yes	65%
No	34%
No Response	1%
FoodPrints Anywhere	
Yes	47%
No	54%

Benefits of FoodPrints Distance Learning

Teachers who reported participating in FoodPrints live virtual classes were asked to share how they saw the classes benefitting their students. Teachers were asked to select from a list of benefits, which included: promoting health through food education; engaging students in interactive, hands-on activities; providing science, literacy, math, art, garden, and/or environmental education; and supporting social emotional learning.

Nearly all classroom teachers who responded to this question (93 percent) stated that the classes helped their students by promoting health through food education. A vast majority also indicated that the classes benefitted their students by engaging students in interactive activities (87 percent) and by supporting social emotional learning (81 percent). Slightly more than three-quarters of teachers (78 percent) agreed that the classes help students by providing educational opportunities in science, literacy, math, art, garden, and/or environmental education. Very few teachers (4 percent) did not choose any of the four options.

	Percent (n = 67)
Promoting health through food education	93%
Engaging students in interactive, hands-on activities	87%
Supporting social emotional learning	81%
Providing science, literacy, math, art, garden, and/or environmental education	78%
No response	4%

Recommendations for Future Distance Learning

In two open-ended questions, classroom teachers were asked to provide recommendations about future FoodPrints distance learning activities. The first question asked teachers to share any changes or enhancements to the FoodPrints distance learning model (virtual classes and FoodPrints Anywhere) they would recommend to better support their students' learning (Table 4). Fewer than half (41 percent) of all teachers who responded to the survey provided a recommendation in response to this question. Many of teachers' recommendations reflected the value they place on FoodPrints and their desire for FoodPrints programming to be more integrated into their school's distance learning activities and more accessible to students and families.

Most of the recommendations that were provided by classroom teachers related to two areas: 1.) program structure and 2.) accessibility of ingredients and other materials. Teachers' recommendations for program structure reflected a desire for FoodPrints to be better integrated into schools' distance learning programs and schedules so that it could be accessible to more students. As one teacher commented, "Easier access so that students can log on themselves. Also, possibly allowing it to be a part of the actual class schedule instead of a separate entity would be helpful. In its current format, most children do not log on the day it is offered because classes are not held on Fridays. If FoodPrints occurred during the school week (for distance learning), there would probably be more participation from my students." Another teacher recommended "making sure FP Teachers have access to all of DCPS internet based learning— Teams." A third teacher suggested that FoodPrints "[p]rovide [a] website or digital platform where students and parents can access videos, recipes, worksheets etc." Similarly, a fourth teacher recommended that FoodPrints "[a]dd videos to our school YouTube channel. Provide recipes and at home activities in our Teams platform or in Clever so they are more accessible to teachers and staff."

Four teachers suggested that FoodPrints offer classes by grade level and/or have smaller class sizes. "I would recommend having grade-level Food Prints sessions instead of school-wide sessions to enhance behavioral supports and virtual instruction etiquette," one teacher explained. "There should be a separate class for each grade level. FoodPrints should be offer as a special class so each grade level will have the opportunity to participate," a second teacher suggested.

Four classroom teachers also asked for live FoodPrints instruction at their schools, and three teachers asked for FoodPrints virtual classes to be offered more frequently. Other recommendations related to program structure included making classes more interactive, featuring and including more FoodPrints teachers in virtual classes, recording live sessions and providing access, and providing more visuals as part of online learning. Two teachers also expressed a desire to connect with FoodPrints teachers to follow-up about lessons or to receive extension activities that they could use to make connections between classroom learning and FoodPrints. "Maybe worksheets attached to the recipes with related math skills, or a reading with comprehension question about the 'history' of that recipe/food, just basically extension activities to help us connect the FoodPrints lesson to their core academics," one teacher suggested.

In addition to recommendations related to program structure, classroom teachers also suggested ways to make cooking lessons more accessible to their students. Seven teachers offered feedback about how to increase access to cooking lesson materials. These recommendations included incorporating Joyful Market foods into cooking lessons, offering a cooking materials pick-up at school sites prior to the lesson, and including materials needed for FoodPrints lessons in students' school supply bag pick-up at

the beginning of the year. “We would love for their to be supplies in next years school supply bag,” one teacher said. “Send the ingredients needed for the recipe for kids to be able to prepare the recipe in the virtual class and offer an early pick up materials at school for the families who might need support getting them,” a second teacher recommended. “I think it would be amazing to incorporate some of the Joyful Market foods to make recipes at home or have a way to pick up supplies to make recipes the day before a lesson,” a third teacher suggested.

Four teachers also asked for more time to access ingredients or suggested that ingredients and recipes be provided well in advance. “A calendar with intended recipes for the week/month so that families can prepare/plan their groceries to encourage participation at home. Often I hear kids saying, ‘I don't have that stuff at home’, but maybe with some notice or a ‘suggested shopping list’ they could participate along with the virtual cooking class,” one teacher explained.

Table 4: What changes or enhancements to our distance learning model (virtual classes and FoodPrints Anywhere) would you recommend to better support your students' learning?	
	Percent (n = 41)
Program Structure	
Easier technology access or integration	12%
More communication about when classes are happening	12%
Better integration into school schedule	12%
Separate classes by grade level and/or have smaller classes	10%
Provide live instruction	10%
Offer classes more frequently	7%
Make classes more interactive	5%
Feature/introduce more FoodPrints teachers	5%
Record live sessions and provide access	2%
Provide more visuals	2%
Create time for FoodPrints and classroom teachers to connect	2%
Provide extension activities to make academic connections	2%
Access to Ingredients and Other Materials	
Add needed supplies to school supply bag, increase access to supplies	17%
More time to access ingredients	10%
Other	5%

Classroom teachers were also asked to share any other recommendations they had about how FoodPrints can support their teaching during remote learning or a modified school schedule. About a third (32 percent) of teachers who responded to the survey provided a recommendation. Teachers’ recommendations in response to this question were similar to those provided above. About one fifth of teachers who provided recommendations suggested a variety of ways that FoodPrints could make it easier for families to access ingredients and kitchen tools for cooking lessons. Two teachers suggested that FoodPrints connect the ingredients required for cooking lessons to the weekly food distribution. As one teacher offered, “Virtual classes are great! I'm wondering (and this may be something you're already doing) if the cooking demonstrations can be based off of the food that is going home in the weekly grocery pick up. That would ensure that most students have them. I know you're already doing all you can to use common household items.” Other teachers asked for recipes to be emailed or posted before class. Three teachers recommended ways to provide greater access to

ingredients and/or kitchen tools. One teacher suggested that the program provide “[a] list of kitchen tools families will need for certain recipes, and loaner kits if families don’t have them.”

Six teachers provided recommendations for how FoodPrints can adjust the structure of its online distance learning. Feedback included creating a set schedule or structure for classes and providing pre-recorded videos for some classes. “Keeping offering great programing, creating a modified gardening and cooking schedule with less students and social distancing,” one teacher suggested. “FoodPrints should be offer as a special class. That way each grade level will have a opportunity to participate,” another teacher recommended. “Perhaps have a regularly scheduled prerecorded video? Once every week or two weeks?” a third teacher asked.

Five teachers requested additional information about cooking, gardening, and food access. “Healthy eating is even more important in the time of this health crisis with inactivity,” one teacher stated. “Maybe more resources on how to consistently obtain healthier food options in urban areas.” “Foodprints can help maintain positive relationships with students and families. It can also keep us educated about seasonal foods as we transition into summer learning,” another teacher added. “Teach us how to garden,” a third teacher suggested.

Four teachers recommended that FoodPrints involve classroom teachers in cooking lessons and/or collaborative planning. “Let the students see the classroom teacher more involve with preparing the meal as well,” one teacher suggested. Another teacher recommended “[t]he continued connecting between FoodPrints and class lessons.”

Several teachers also requested supplemental materials and extension lessons. “Since there are only 2 [FoodPrints] teachers for the whole grade school, they could provide supplemental material with skills or lessons that homeroom teachers can teach/reinforce until the students next virtual session,” one teacher recommended. “Giving classroom teachers ideas for outdoor activities to do with the kids during social distancing at school come August,” a second teacher suggested. A third teacher recommended a way to extend learning within FoodPrints sessions: “Discussions with math – in kindergarten they learn about addition and subtraction so maybe real-life ‘word problems’ with cooking/measuring/counting where kids will have to add and subtract.”

One teacher asked for additional visuals to be incorporated during FoodPrints distance learning sessions, and another teacher suggested the program partner with Food Banks to provide produce from school gardens to families with limited food access. Other recommendations included more communication about distance learning opportunities, engaging in schools’ Class Dojo sites, and “having the students create their own healthy meal once a week and showcase their recipe on Microsoft Teams.”

Table 5: How else can FoodPrints support your teaching during remote learning or a modified school schedule?	
	Percent (n = 32)
Increase access to ingredients and kitchen tools	22%
Modify structure of distance learning	19%
Provide additional information about cooking, gardening, and food access	16%
Involve classroom teachers in planning and delivering lessons	13%
Provide supplemental materials and extension lessons	9%
Provide more visuals during lessons	3%

Partner with Food Banks to make school garden produce accessible to families with limited food access	3%
Other	9%

Positive Feedback for FoodPrints

In their responses to these two open-ended questions, a number of teachers also used these questions as an opportunity to share positive feedback about the program overall and/or specific FoodPrints teachers. These comments included:

“I think anytime FoodPrints is in my class, my students are super engaged!”

“This is excellent SEL for students AND parents. It is the only way some families socialize and it keeps friendships alive. Dinners together were lots of fun.”

“Continue sharing the awesome songs, lessons, cooking videos, and recipes! Thank you for popping into our Morning Meeting to engage students!”

“No changes! the classes were awesome. Even my children at home enjoyed watching the classes.”

“Continue what you guys are doing! it has been great for students!”

“My students loved when Ms. Rain read to them.”

“None at this time. Ms. Thomas provided families with clear cut recipes and uploaded videos modeling how to create the dishes.”

“Keep doing what you are doing! Ms. Vincent provided the receipes in advance so that my families would be prepared for the lessons. I like how she made the ingredients flexible so that my families did not have to go to the store if they did not want to! My students and I LOVE FOOD PRINTS LESSONS with Ms. Vincent!”

“Keep Ms. Sollee and Ms. White!”

“Ms. Schiff did an amazing job with the virtual food prints lesson connecting with my students.”

“Brittany was awesome! She was super helpful and flexible!”

Family Engagement with FoodPrints Distance Learning: Results from Parent Surveys

In May and June 2020, family members of FoodPrints students were asked to complete a brief online survey about their experiences with FoodPrints distance learning. From May 17 to June 5, FoodPrints received 93 responses from family members. Most families who responded (76 percent) had participated in at least one type of FoodPrints distance learning activity (synchronous or asynchronous).

The vast majority of respondents who participated in FoodPrints distance learning (99 percent) indicated that the programming provided a benefit to their family, and most respondents (73 percent) indicated that FoodPrints distance learning had provided multiple benefits to their household. About three-quarters of family members said that distance learning had helped them cook together as a family. Nearly half of respondents indicated that programming had helped them think creatively about how to use what they have at home in recipes (46 percent) and incorporate more fruit and vegetables into their diet (45 percent). The major barriers to participation reported by families were time to engage in distance learning activities and accessibility of ingredients needed to participate in cooking lessons. In terms of recommendations, parents were eager to see more cooking classes. More than half of respondents also expressed a desire to remain connected to their FoodPrints teacher as part of distance learning and about half reported an interest in garden and science activities.

Who responded to the survey?

Family members from eight FoodPrints partner schools responded to the survey. A little over half of the responses were from family members at Watkins Elementary and School Without Walls Francis Stevens. Nearly 20 percent of responses were from family members with a student at Peabody, and 11 percent were from Kimball Elementary family members. Less than 10 percent of responses were received from family members with students at Anne Beers, Lafayette, Tyler, and School Within School. One respondent listed their school as “Columbia Heights CHEC Campus, Washington College.”

	Percent (n = 93)
Watkins Elementary	29%
School Without Walls Francis Stevens	24%
Peabody Elementary	19%
Kimball Elementary	11%
Anne Beers Elementary	5%
Lafayette Elementary	5%
Tyler Elementary	3%
School Within School	1%
No Response	1%
Other	1%

Participation in Distance Learning

About three-quarters of families who responded (76 percent) indicated that they had participated in at least one form of FoodPrints distance learning (live classes or asynchronous activities), and about a quarter of families (26 percent) had participated in both types of learning.

Family members who responded were more likely to report participating in virtual classes versus engaging with FoodPrints Anywhere (asynchronous activities).

Virtual Classes: A majority of family members responding (61 percent) had participated in at least one FoodPrints virtual class.

Table 2: Have you participated in virtual class(es) with your FoodPrints teacher?	
	Percent (n = 93)
Yes	61%
No	39%

FoodPrints Anywhere: Less than half of family members who responded to the survey (41%) reported that they had used FoodPrints Anywhere resources.

Table 3: Have you used FoodPrints Anywhere online cooking and gardening activities?	
	Percent (n = 93)
Yes	41%
No	57%

Of the family members who indicated they had engaged in at least one type of FoodPrints distance learning, about a third said they took part in FoodPrints distance learning a couple of times a month. About a quarter of families reported engaging once a month, and about a quarter said they had participated less than once a month. Fewer family members said they had engaged more frequently: once a week (11 percent) or multiple times a week (5 percent).

Table 4: How often have you done virtual FoodPrints classes or FoodPrints Anywhere activities at home during school closure?	
	Percent (n = 75)
Multiple times a week	5%
Once a week	11%
A couple times a month	36%
Once a month	25%
Less than once a month	23%

Benefits of FoodPrints Distance Learning

Families were asked whether FoodPrints distance learning provided them with ideas or encouragement to: cook together as a family, help their child cook independently, incorporate more fruits and vegetables into their diet, think creatively about how to use what they have at home in recipes, grow and learn about plants at home, support my child in academically enriching projects, and/or create

environmentally themed craft projects using what they have at home. Families were also able to write in their own responses.

The vast majority of respondents who participated in FoodPrints distance learning (99 percent) indicated that the programming provided a benefit to their family. Most respondents (73 percent) indicated that FoodPrints distance learning had provided multiple benefits to their household.

About three-quarters of family members said that distance learning had helped them cook together as a family. Nearly half of respondents indicated that programming had helped them think creatively about how to use what they have at home in recipes (46 percent) and incorporate more fruit and vegetables into their diet (45 percent). Close to 40 percent reported that distance learning had supported their child(ren) in academically enriching projects. Slightly more than a third (35 percent) stated that FoodPrints distance learning had helped their child cook independently and grow and learn about plants at home. Fewer family members (15 percent) said that distance learning had enabled their child to create environmentally themed craft projects using what they have at home.

Table 5: FoodPrints virtual classes and/or FoodPrints Anywhere has provided us with ideas or encouragement to...	
	Percent (n = 71)
Cook together as a family	76%
Think creatively about how to use what I have at home in recipes	46%
Incorporate more fruits and vegetables into our diet	45%
Support my child in academically enriching projects	39%
Help my child cook independently	35%
Grow and learn about plants at home	35%
Create environmentally themed craft project using what we have at home	15%
Other	4%

Barriers to Participation

In an open-ended question, respondents were asked if they had experienced difficulty participating in distance learning activities, what would make the activities more accessible. One-third of respondents answered this question. Their open-ended responses were coded to identify common themes.

Of the family members who responded to this question, 35 percent indicated time as a barrier to participation. This response was most common among families who were working full time and attempting to coordinate their children’s school activities at the same time. Nearly a quarter of family members (23 percent) who responded to this question said that they were unaware of distance learning activities. Close to one-fifth of families (19 percent) expressed a difficulty obtaining ingredients that they needed to participate in classes, either due to having limited income to spend on food or due to making trips to purchase food less frequently due to the pandemic. Fewer respondents mentioned the structure of classes (13 percent) technology platform (6 percent) as barriers.

Table 6: If it has been difficult to participate in FoodPrints distance learning, please share with us how it could be more accessible for you.	
	Percent (n = 93)
Difficulty finding time to participate	35%
Not aware of distance learning activities	23%
Difficulty obtaining ingredients	19%
Structure of classes	16%
Technology platform	6%
Other	10%

Recommendations for Future Distance Learning

Family members were asked to provide recommendations about the content and structure of future FoodPrints distance learning activities. Respondents were provided with a list of choices for content area and structure and were also provided with the opportunity to write in other responses.

In terms of the content of future distance learning activities, family members were eager to see more cooking classes: 89 percent of respondents indicated a preference for cooking classes. More than half (57 percent) expressed a desire to remain connected to their FoodPrints teacher as part of distance learning, and about half (51 percent) reported an interest in garden and science activities. One-third of respondents indicated that they would like to see food and garden-themed book clubs for kids. No participants provided other responses, and three participants did not provide a response to this question.

Table 7: If FoodPrints distance learning continues next fall, what focus area(s) would be most valuable to you?	
	Percent (n = 93)
Cooking classes	89%
Opportunities to stay connected to our FoodPrints teacher	57%
Garden/science activities	51%
Food and garden-themed book clubs for kids	34%

In terms of structure of future distance learning classes, there is demand for both synchronous (live classes) and asynchronous (recorded classes) content. About three-quarters of respondents (77 percent) expressed a desire for live classes, and 60 percent indicated that they would like to see recorded classes. A majority of family members (65 percent) requested activities they could do as a family, and 44 percent asked for independent activities for their child(ren). In terms of the frequency, more respondents (47 percent) indicated a preference for new activities offered a few times a month than those who indicated a preference for new activities offered weekly (15 percent).

Table 8: If FoodPrints distance learning continues next fall, what formats would be most valuable to you?	
	Percent (n = 93)
Live classes	77%
Recorded classes	60%
Activities we can do as a family	65%

Independent activities for my child(ren)	44%
New activities offered a few times a month	47%
New activities offered weekly	15%
Other	2%

Conclusion

Parents who responded to the survey expressed positive perceptions of FoodPrints distance learning. Nearly all (99 percent) indicated that the programming provided a benefit to their family, and most respondents (73 percent) indicated that FoodPrints distance learning had provided multiple benefits to their household. Cooking lessons were a favorite among parents who responded to the survey. About three-quarters of family members said that distance learning had helped them cook together as a family. Nearly half of respondents indicated that programming had helped them think creatively about how to use what they have at home in recipes (46 percent) and incorporate more fruit and vegetables into their diet (45 percent). The major barriers to participation reported by families were time to engage in distance learning activities and accessibility of ingredients needed to participate in cooking lessons. In terms of recommendations for future distance learning classes, parents were eager to see more cooking classes. More than half of respondents also expressed a desire to remain connected to their FoodPrints teacher as part of distance learning and about half reported an interest in garden and science activities.

Conclusion

This process evaluation was designed to examine the creation and implementation of FoodPrints distance learning by collecting and analyzing data from FoodPrints teachers, classroom teachers at FoodPrints partner schools, and parents of FoodPrints students. From May to June 2020, the author of this report, in collaboration with FoodPrints staff, completed interviews with 11 FoodPrints teachers and analyzed surveys from 101 DCPS classroom teachers and 93 family members.

In a context of great uncertainty and change brought about by the Coronavirus pandemic, FoodPrints designed and implemented flexible, adaptable distance learning that responded to different contexts at its partner schools. Distance learning included both synchronous (live classes) and asynchronous (recorded classes, newsletters, and online resources) forms of distance learning.

FoodPrints classes provided an avenue for students to continue their garden and food education and to discover that they could transfer these skills to their homes. In turn, FoodPrints teachers who taught live classes observed instances of distance learning fostering a sense of pride, confidence, and self-efficacy in students.

One benefit from the transition from in-person to distance learning classes was the increased opportunity for family engagement. FoodPrints teachers observed an increase in parent involvement in live virtual classes and also received positive feedback on recorded classes from parents via platforms such as Class Dojo. In some cases, parent engagement in live classes translated into observations of parents enjoying cooking activities with their children and gaining a new perspective on their children's skills and capacities. In surveys, parents reported multiple benefits from engaging in FoodPrints distance learning, including helping them cook together as a family, think creatively about how to use what they have at home in recipes, and incorporate more fruits and vegetables into their diet.

Most classroom teachers who participated in FoodPrints live virtual classes shared that the classes helped their students by promoting health through food education (93 percent); engaging students in interactive activities (87 percent); supporting social emotional learning (81 percent); and providing educational opportunities in science, literacy, math, art, garden, and/or environmental education (78 percent). Many teachers provided recommendations for how to make FoodPrints distance learning more integrated with school activities and more accessible if distance learning continues in the fall.

Inequalities in access to distance learning were observed in the DCPS general education distance learning program and also existed in FoodPrints virtual live classes. Challenges related to technology and food access limited some students' ability to participate in live classes. Within this context, FoodPrints teachers designed their lessons with accessibility in mind and found that "keeping it simple" – offering lots of flexibility in ingredients, celebrating the different ingredients that students brought to the table, and providing advance notice about recipes and ingredients – helped them to grow and sustain engagement in virtual cooking lessons.