

Expanding Nutrition Education Programs in New York City Elementary Schools

Understanding Practice to Inform Policy



Executive Summary



Laurie M. Tisch Center for Food, Education & Policy Program in Nutrition at Teachers College, Columbia University

The Center cultivates research about connections between a just, sustainable food system and healthy eating and translates it into recommendations and resources for educators, policy makers, and community advocates. The Center focuses on schools as critical levers for learning and social change.

Based on the doctoral dissertation of:

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***Bringing Nutrition Education Programs from Outside Sources into the Classroom:
The Experience of New York City Public Elementary Schools***

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Photo: iStock by Getty images

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Introduction

As a nation we are working collectively to reduce the high rates of childhood obesity. Access to health-promoting foods is the foundation we need to promote our children's health. Yet, access alone is not enough. When access to healthy foods is combined with nutrition education, this can have a powerful impact on changing children's eating behaviors in ways that decrease childhood obesity. Schools are important places for promoting children's development by giving them access to food and providing quality nutrition education. Quality nutrition education in schools can include art, cooking, gardening, physical activity, learning about the food system, and a STEM focused curricula. Also, helping children build the desire to make healthy food choices fits into a whole-child approach to education, and may support academic achievement.

There are many Nutrition Education Programs (NEPs) run by non-profits, agencies, departments of health, and universities that work alongside teachers, school administrators and staff to increase quality nutrition education in schools. NEPs provide nutrition expertise, materials, curricula, and teacher professional development. This enables students to have more and higher quality nutrition education without overtaxing classroom teachers who are already expected to do so much for our students.

This report highlights a study conducted by the Laurie M. Tisch Center for Food, Education & Policy about NEPs that reach New York City public elementary schools in three boroughs. It describes the kinds of NEPs available, their distribution, and if they are reaching the schools that need them the most. The report also details what is going well, and how accessibility to NEPs can be improved. Additionally, the resource section at the end of the report describes many of the NEPs available to elementary schools in New York City.

Methodology

We created a NEP database from an initial web search and previous knowledge plus feedback from NEP staff about other programs until reaching saturation. We sent a survey to the 34 identified NEPs on the basic traits of their program including mission, the schools that implemented their program, and schools that implemented the program well. We received responses from the 20 included in this report.

An elementary school database was also created using data from: 1) the Department of Education for 3 boroughs (Brooklyn, Manhattan and Queens), 2) the New York State School Report Card and Accountability Reports, and the 3) New York City Department of Health and Mental Hygiene.

We combined together the schools database with the NEPs database to determine which schools received services from NEPs during the 2011-12 school year. This information allowed us to analyze the overall saturation of NEPs in schools and the differences in the distribution of NEPs by geographic location, school traits, and community need.

Five of the 20 NEPs were defined as "needs-based" since they specifically target schools with a high percentage of students who qualify for free/reduced price lunch (FRL), or schools in neighborhoods with high chronic disease rates. From this we examined the extent to which total NEPs and need-based NEPs reached the highest need schools, to determine if there was equitable distribution.

Finally, we interviewed 20 community members from schools with active NEPs to learn how NEPs were working in schools.

Results

Characteristics of Nutrition Education Program in New

York City schools: The NEPs available to New York City schools vary widely in factors such as how long they have been in existence, where they get their funding from, what kind of content they cover and what roles they play within schools. This section shares data on the characteristics of the NEPs reviewed for this study.

- The majority of NEPs operating today started in 2005 or later.
- Most of the programs receive at least some funding from foundations and corporations. Although almost half of the programs receive some funding from New York City government, few receive funding at the state or federal level.
- While the greatest number of programs are taught by classroom teachers and program staff, a significant number utilize just classroom teachers or just program staff.
- Most of the programs provide multiple types of implementation support, extending the schools' ability to provide nutrition education to students.
- The NEPs available in New York City schools vary widely in terms of how much of the school year they span and how many total sessions they offer, with over half of the NEPs having six or more sessions.
- Many NEPs address more than one academic subject with 15 of the 20 addressing three or more subjects.

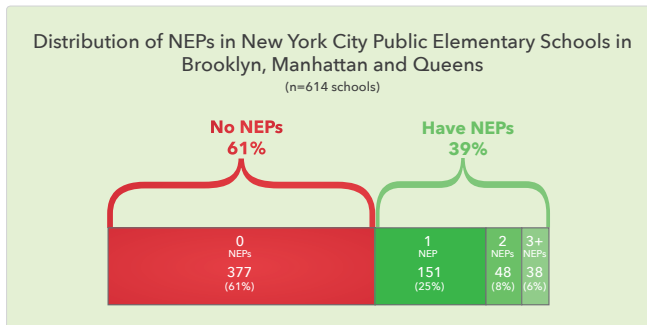
Distribution of Nutrition Education Program in New York

City Schools: This section presents data on how many schools have any NEPs followed by information regarding how total NEPs and needs-based NEPs are distributed. Specifically we present data on distribution across schools by the percentage

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of students who qualify for FRL, neighborhood childhood obesity rates, presence in District Public Health Office (DPHO) neighborhoods, and borough.

- Overall, only 39% of school in the three boroughs that were studied (Manhattan, Brooklyn, and Queens) had any of the 20 NEPs in their schools. Most of the schools that had NEPs had 1. Fourteen percent had more than 1 NEP with 4 schools having 5 or more NEPs. These data show that there are many elementary schools in New York City that are not being served by NEPs.
- Needs-based NEPs are concentrated in schools with >50% FRL. However, schools with <50% FRL have slightly higher proportions of total NEPs than their more in-need peers.
- NEPs are more likely to be in schools within the lowest and highest rates of childhood obesity. The proportion of needs-based NEPs is higher in neighborhoods with 23.1–26.5% obesity rates.
- Schools in DPHO neighborhoods have a slightly lower proportion of total NEPs but a higher proportion of needs-based NEPs.
- Manhattan has a slightly higher proportion of schools with total NEPs than the other two boroughs.



Successes

We found that both NEPs and schools were experiencing successes in terms of nutrition education implementation. The successes identified in this section come from data from the NEP and school databases as well as from the 20 interviews with community members from schools with active NEPs.

NEP Successes

- NEPs are targeting high-needs schools.
- Most NEPs have collected data, or are collecting data on their students.
- NEPs are helping schools achieve their mission.

School Successes

- Schools use multiple efforts to strengthen the impact of

NEPs, such as teaching nutrition units in science, health and other subjects.

- Schools with a range of capacities have NEPs.
- Schools are using creative ways to address barriers to nutrition education.

Recommendations

For Schools: Schools can use this guide to find NEPs and choose the one that fits the school's needs. They can also evaluate if they are providing enough nutrition education to help students make healthy choices and, if not, consider adding more NEPs to their schools. Finally, NEPs can be successfully implemented if there is a team of champions in the school and NEPs can complement each other.

For NEPs: NEPs can make sure that more students, in particular those in high-need schools, are reached by considering a sliding scale fee structure and using multiple factors as a measure of need. Also, NEPs can assess how they are supporting the school, rather than being seen as something additional. Finally, NEPs can promote the variety of benefits they provide to schools such as supporting academic success, improving eating behaviors, and building community.

For Funders and Policy Makers: Funders and policy makers can increase funding for NEPs to be responsive to the urgency around the obesity epidemic while working towards a goal of 80% of NYC schools with NEPs by 2020. This can be done through increased geographically and need targeted funding by government and others, and policy mandating nutrition education in schools.

Conclusions

While NEPs are in many New York City public elementary schools, there is much room for expansion, particularly among schools in neighborhoods with high rates of childhood obesity and schools with large proportion of low-income students.

Future Research

This study should be replicated in other metropolitan areas to benefit those municipalities and contribute to a greater understanding of NEPs in schools.

In New York, further research could explore the cumulative effect of multiple NEPs in schools and communities and measure the effectiveness of each program. Additionally, future research can track the number of NEPs and distribution of NEPs in schools over time. This research should be done across all five boroughs of New York City.