

Summary of Program and Study

The Agatston Urban Nutrition Initiative is a program of the Netter center for Community Partnerships at the University of Pennsylvania that engages, educates and empowers youth, university students, and community members to promote healthy lifestyles and build a just and sustainable food system. The Growing Together Youth Empowerment Program addresses some of the major issues that adversely affect adolescent health and achievement in West Philadelphia. According to the School District of Philadelphia's latest District Scorecard (SY 2015-2016) ¹, the Four-Year Cohort Graduation rate was 66%, the first-fall college matriculation rate was 51% and 13% of 12th grade students achieved college readiness benchmarks on the SAT or ACT. 42% of students attended 95% or more of instructions days. In the latest Community Health Assessment Summary², 36% of children are living in poverty across Philadelphia, 22.9% of residents are in poor or fair health, and teen (9th- 12th grade) obesity rate is 17.3 % compared to the 13.0% across the US as a whole. The adult obesity rate in Philadelphia is 32%. Adult hypertension and diabetes is more common in Philadelphia than in any other of the 10 largest countries in the US. Teens in Philadelphia also face challenges such as teen pregnancy, violence, and high rates of child mortality. Many of these issues disproportionately affect non-Hispanic black children, teens, and adults.

As part of the Growing Together Youth Empowerment Project (YEP), students from William L. Sayre and Paul Robeson High Schools participated in group nutrition education 15 hours per week in the after-school setting with a community service component. The Youth Empowerment Program seeks to address unhealthy behaviors in at-risk minority youth 10-18 years of age.³ AUNI approaches the goal of providing youth with opportunities to learn and gain experiences for a healthier lifestyle through after-school programming with community service. AUNI seeks to improve education and empowerment around nutrition and food justice while also improving school outcomes in participating students. Both of these School District of Philadelphia schools are in communities that experience high rates of poverty, violence, and chronic disease. Measures of high school success markers were compared in students who were involved in YEP to the school averages.

Objectives

To explore the impact of out-of-school-time nutrition education on markers of academic success by considering YEP participating students' attendance, days tardy, and GPA compared to the school's average markers of attendance, days tardy, and GPA .

Outcome Measures and Analysis

Comparisons were made between 41 students engaged in the Growing Together YEP program to school averages for William L. Sayre High School and Paul Robeson High School for Human Services. Both schools are within the Philadelphia School District. Schools collect data differently

Measures of high school success markers:

- GPA
- Days absent
- Days tardy

Time frame:

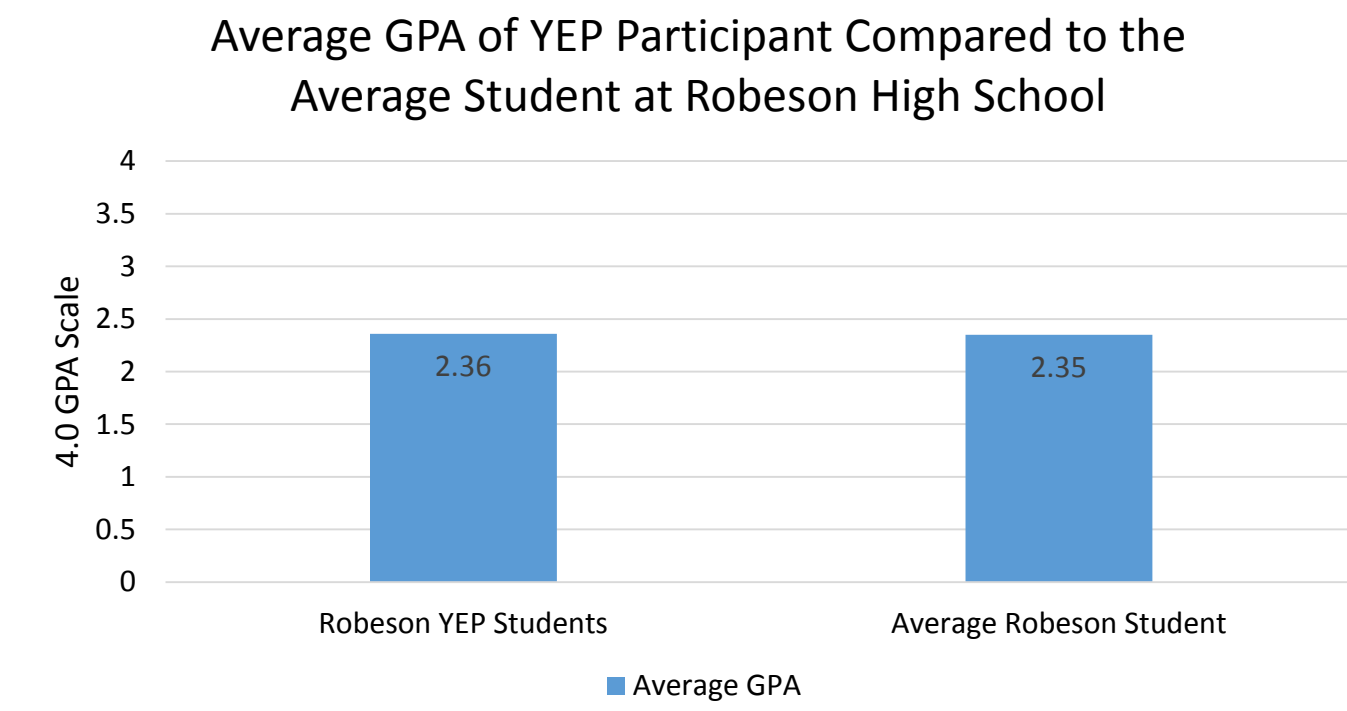
- Between September 7, 2016 and February 6, 2017.

Data Source:

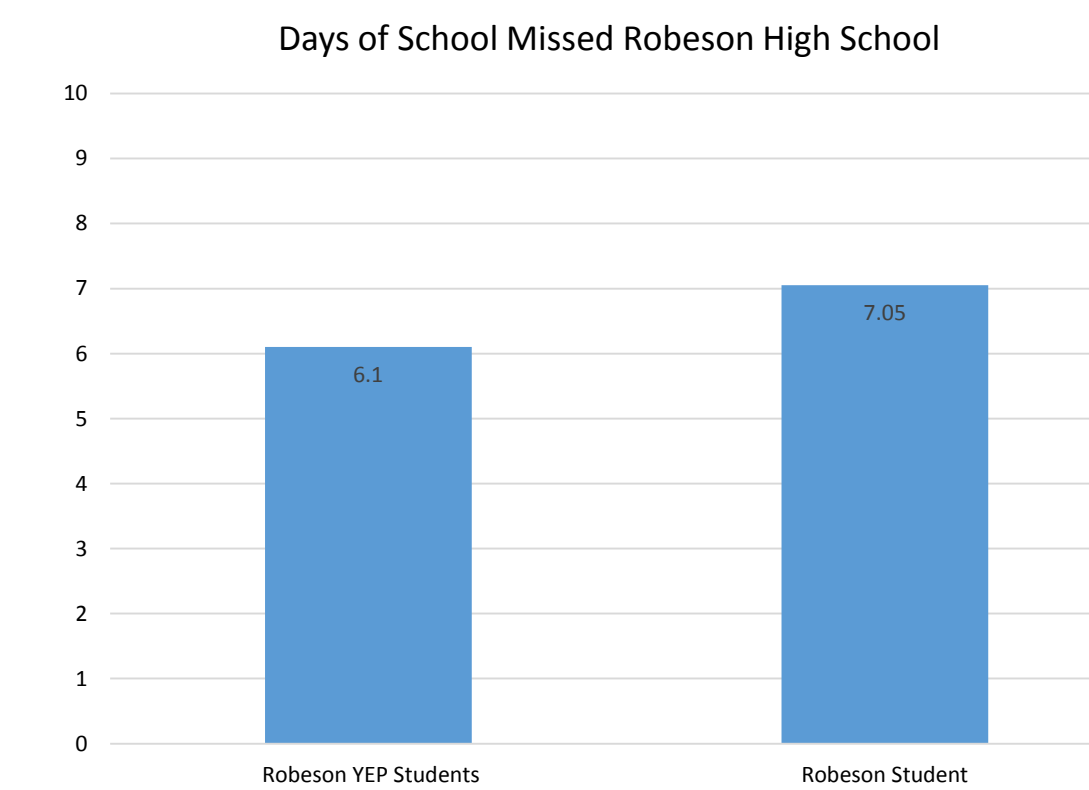
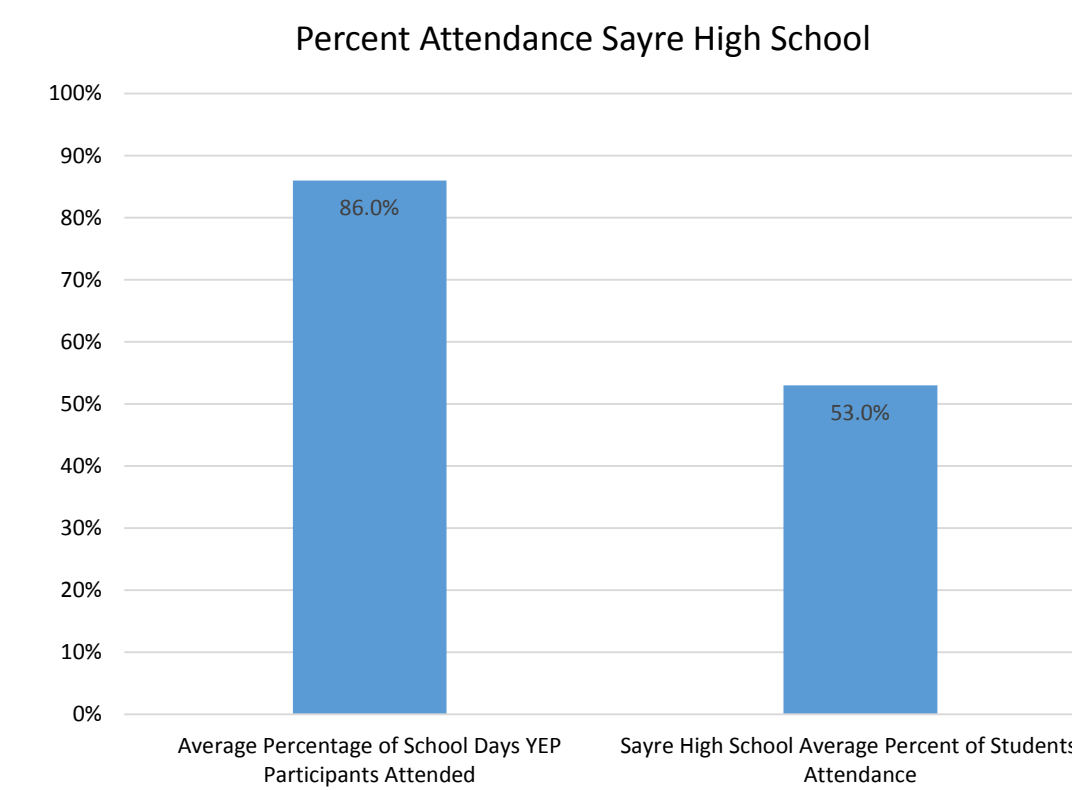
- Report cards of 23 students from Sayre and 18 students from Robeson. Data for the student body was provided by administrative staff at each school.

Results

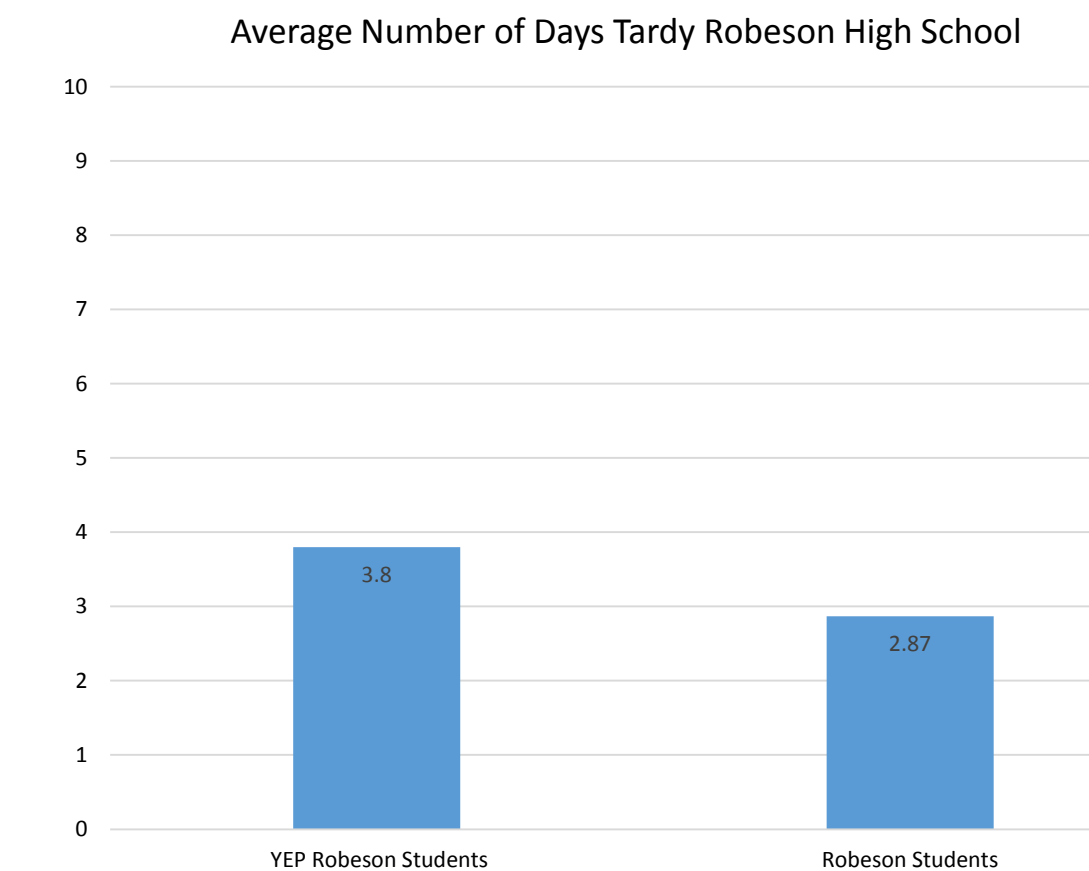
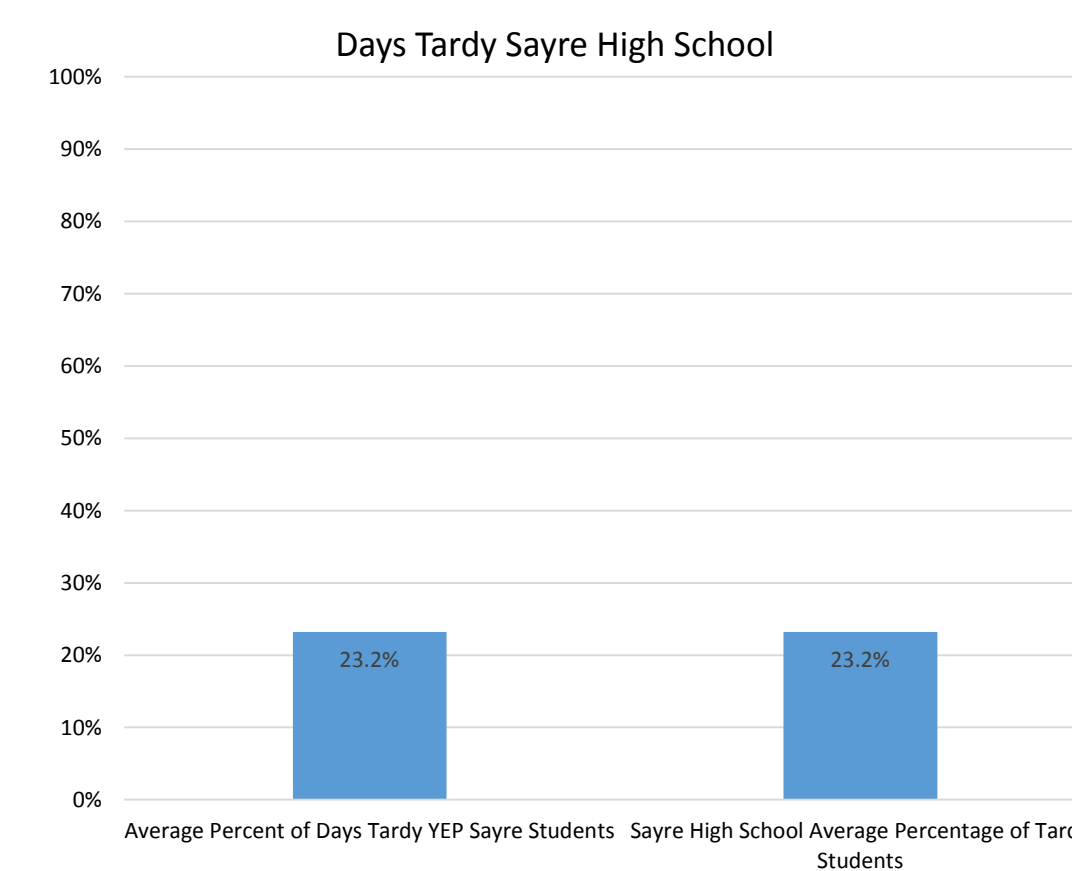
GPA: GPA comparison data was only available at Robeson with YEP students averaging 2.36 and all students averaging 2.35.



Days Absent: On average, YEP Sayre students were present 86% of days this compares to Sayre's average attendance rates of 53% of students present. YEP Robeson students missed an average of 6.1 compared to 7.05 days absent for the Robeson student population as a whole



Days Tardy: On average, YEP Sayre students were tardy 23.2% of days which compares to Sayre's average tardy rate of 23.2% tardy days. Robeson students were tardy 3.8 days compared to an average of 2.87 days tardy for the student population.



Conclusion

The Growing Together Youth Empowerment Program at the Agatston Urban Nutrition Initiative had positive impact on high school success markers, most markedly so in attendance. School attendance is a major issue for the School District of Philadelphia. While not always directly correlated, attending school can assist with grades, standardized test scores, and positive adult relationships.

There were some limitations to the analysis including the cross-sectional nature of the study. AUNI is currently working on analyzing these markers over a longer period of time and taking into consideration a variety of other youth empowerment factors. Additionally, each school collects data differently. This analysis was still informative that this programming and similar programming have the opportunity to make impactful change beyond nutrition related knowledge.

Implications for Future Programming

Nutrition education is often ancillary to high school curriculum. This study demonstrates that nutrition education can have broader impacts when compared to students not in the program, particularly around the development of 21st Century Skills. This has implications for developing programs aimed at improving outcomes for high school students in under-resourced urban areas. Nutrition education programs can have a lasting impact on students' lives not only by building specific skills but also by increasing school engagement overall.

Further studies on a larger scale would be beneficial. Additionally, studies regarding the most effective curriculums for the largest impact on success markers would help shape programs.

References and Acknowledgements

- 1.) School District of Philadelphia SY2015-2016 District Scorecard: <http://webgui.phila.k12.pa.us/uploads/Xv/3s/Xv3shj6NqQddu-scMCKb9w/2015-16-District-Scorecard-20170222.pdf>
- 2.) 2016 Community Health Assessment (CHA) Philadelphia, PA; Philadelphia Department of Public Health: <http://www.phila.gov/health/pdfs/CommunityHealthAssessment2016.pdf>
- 3.) Office of Minority Health. <https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=2&lvlid=80>

Funding from: Office of Minority Health Youth Empowerment Program and USDA SNAP-Ed