School-Based Gardens: Increasing Nutritional Access and Physical Activity of Children in Gillette, Wyoming through School-Based Gardens and Nutritional Education

Aaron Robertson | RUOP iii-3 | 2018 | University of Washington School of Medicine

HYPOTHESIS

Participation in a school-based garden and nutritional education will increase physical activity and decrease childhood obesity in the Campbell County School District

BACKGROUND

- Gillette, WY is the county seat of Campbell County, Wyoming with a population of 32,398 and a primary economy of energy production
- Gillette is well funded with great community programs, but still has significant health challenges
- Obesity rates: Campbell County has a childhood obesity rate of 27.1% and adult obesity rate of 34%
- Nutritional environment: Campbell County fast-food restaurants have increased by 22% over the past 5 years while access to fresh fruits and vegetables has decreased by 3.3%
- The 24 schools in the Campbell County School District have lower access to fresh fruits and vegetables, as reported by the community

• Partnesservice Service

Gillette is called the "Energy Capital of the Nation"



Devils Tower northeast of Gillette

LITERATURE REVIEW

- School-based garden (SBG) interventions have been implemented successfully across the US
- SBG interventions showed improvements in nutritional knowledge, reduction in BMIs and an increase in physical activity
- The most successful SBG interventions involved participation with the children's families

PROJECT PLAN

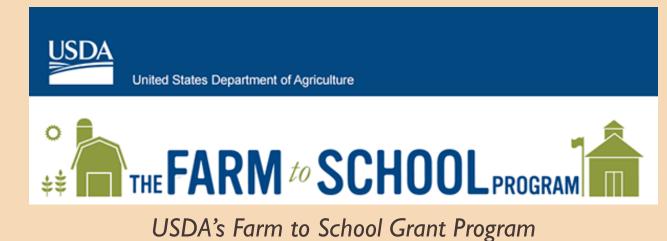
- Partnership developed with the Nutrition Services Director of Campbell County School District
- With Wyoming's short growing period, practical SBG intervention options were considered such as raised-bed hoop-gardens and indoor hydroponic tower gardens



Raised-Bed Hoop-Garden

DELIVERABLES

- Community partner received literature review, hoop-garden design and hydroponic tower garden options
- Outlined funding opportunities with grants from the United States Department of Agriculture's Farm to School Grant Program and the Wyoming Department of Education's Wyoming Farm to School Expansion and Evaluation Plan



NEXT STEPS

- Recruit support from principals and teachers from the specific schools in the Campbell County School District
- Promote the program throughout community and make sure families of students are involved
- Apply for grants to help fund the program and secure the longevity of the program

ACKNOLEDGEMENTS

Special thank you to Bryan Young, Dr. Larry Kirven and Dr. Erica Rinker for your guidance on this project!