Extension horticulture and nutrition—impacting kids and communities

The Situation
The national epidemics of childhood obesity and undernourishment are health, academic, and economic issues. While some children don’t get enough to eat or enough of the healthy, nutritious foods growing minds and bodies need, others eat too many of the wrong things. Too many choices in unhealthy foods available to children has resulted in nutrition education being more important than ever, however, with budget cuts and increased demands on teachers, nutrition education taught in schools continues to decline. Additionally, many kids don’t get to play or be active every day. As a result, nearly 1 in 3 American children is overweight or obese.

The combination of horticulture and nutrition education, through the creation and use of school gardens, continues to emerge as a popular method for combating these epidemics. Students acquire the knowledge to make healthy food choices, are able to be physically active while learning, and even acquire the skills to grow their own fruits and vegetables. However, with budget cuts on public school funding, schools can be reluctant to convert school grounds to garden areas due to installation costs and annual costs and care.

Our Response
University of Idaho Extension and Extension Nutrition provided support and facilitated the establishment of a parent wellness group at Lewiston’s Orchard Elementary School. This group included parents, grandparents, and members of the community. Extension personnel paired up with this parent group, as well as the North Central Idaho District Public Health, to continue addressing obesity and undernourishment issues facing local communities.

A Pumpkin Project was developed to meet both Extension and Orchard Elementary School 4th graders education needs based upon the objectives of; providing age-appropriate nutrition and horticulture education; and facilitating experiential and physically active learning opportunities.

The project encompassed lessons from the “How Things Grow” Extension Nutrition curriculum, student narrative inquiry though science journal entries, and hands-on activities including: growing pumpkin starts from seed in the classroom, establishment of a pumpkin patch at the local community garden, monthly summer garden workdays, participation in “Save the Pumpkin” community event, and multigenerational interactions with local elders. Funding provided through an Action for Healthy Kids Wellness Grant, designed to assist parents in helping to improve the way children eat and move at school, allowed for supplies for classroom planting activities.
pumpkin patch set-up, travel costs, student incentives, and healthy snacks to be purchased.

To assess the effectiveness of the project students were asked to complete a pre- and post-project questionnaire that covered both nutritional and horticulture components.

**Program Outcomes**

In early spring 2010, forty-nine 4th graders participated in the *Pumpkin Project* by learning “How Things Grow,” making their own newspaper pots, and caring for pumpkin transplants from seed to patch. The 4th graders had the opportunity to track the growth of both their seeds and themselves by making daily observations and journal entries. In late spring, students had the opportunity to spend half a day at the Osborn Community Garden located within the boundaries of a local community park. Students received a park tour including the green roof structure, butterfly garden, and fitness walking path before ending their tour by transplanting their seedlings at the newly established pumpkin patch. Despite the less than ideal conditions during the 2010 growing season, 60 pumpkins were harvested in early November 2010 by the students, decorated, and donated to the Lewis-Clark State College, Latina Sorority “Save the Pumpkin” community event. Orchard’s 5th graders and their families were invited to take part in the event, where pumpkin and apple pies from scratch are made for distribution to the community via local food banks, meals-on-wheels programs, and senior meal sites. The *Pumpkin Project* program ended with 5th grade students sharing pies they made from pumpkins they grew. They summarized the experience by telling their “pumpkin story” to local elders at the Orchard’s Senior Meal site. At the end of the project students were reassessed using a post-project questionnaire; 76% of the students scored 70% or better on the post-project questionnaire, a 42% increase in knowledge gain from the pre-project questionnaire.

**References**


