

**Results from the
2007 Oregon School Garden Inventory**

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2007 Oregon School Garden Survey Results

During the 2006-2007 school year, the Oregon Department of Education surveyed schools statewide to gather benchmark data on existing school gardens and the role they play in education, wellness and skills development. The survey also evaluated how school gardens are managed, funded and maintained throughout the academic year and during the summer months. The following is a summary of the findings. Questions posed in the survey are presented in italics.

Where Do Oregon School Gardens Grow?

More than 160 school gardens are growing throughout Oregon, with Multnomah County home to 44 and Lane County with 30 gardens leading the state. In descending order, the following counties are represented: Clackamas (10), Yamhill (7), Washington (6), Marion (6), Linn (6), Benton (6), Jackson (5), Wasco (5), Tillamook (4), Deschutes (3), Malheur (3), and Hood River (3). Wallowa, Baker, Douglas, Coos, Lincoln, Polk, and Josephine counties all report two school gardens in each of their respective counties, while Umatilla, Harney, Union, Crook, Grant, Morrow, Jefferson, Columbia and Curry report one school garden in each of their counties.

How would you describe your school garden? How old is your garden? What are the primary goals of your garden program?

Most school gardens are self-described as predominantly consisting of raised beds (58%), greenhouse (44%) or garden plots (37%). Container gardens (13%), native gardens (9%), rain gardens (4%), trees (3%) and wildlife habitat (3%) made up the remainder garden descriptors.

A majority of school gardens have been in existence for three to five years (37%) and 34% reported having gardens for more than six years. Twenty-two percent of gardens got started in the past one to two years while 6% were unable to determine their start date.

The top three goals of garden program organizers are hands-on learning (92%), academic information (79%) and environmental education (74%). High numbers were also reported for agricultural education (64%), community involvement (55%) youth development (38%) and health behaviors (28%), while economic development (15%), gardening skills (4%), wellness (3%), outdoor experience (2%) and career development (2%) were ranked lower.

Student Engagement

What grades are involved? How many students are involved? How many hours per month do students spend participating in garden-related activities?

Students involved in getting their hands dirty are predominantly represented by the younger set. Kindergarteners through 4th grade make up 57% of gardeners while 5th through 8th graders represent 54% of school garden participants, and ninth through 12th graders represent about 30% of gardeners.

17% have more than 200 sets of hands occupied with some facet of the school garden. Eight percent have 101 to 200 students; 46% have engaged 31 to 100 students; 29% reported one to 30 students involved in the garden.

Time Well Spent

Thirty-six percent of students spend more than 5 hours taking part in garden-related activities, 21% spend between four and five hours, 30% participate for two to three hours and 12% spend an hour or less of their time in the garden.

Community Involvement

Is there a group that meets to coordinate garden-related activities? Who is represented on the garden committee? How many teachers are involved? How many parents and volunteers are involved?

Garden committees are deemed necessary for 56% percent of respondents while 42% opt to operate without one. Two percent are unsure of one's existence. When utilized, the committee is represented predominantly by teachers (86%), a principal (56%), parents (49%), and community members (46%). To a lesser extent, students (35%), custodians (27%), food service personnel (14%), farmer (13%), chef (8%), educational assistant (7%), coach (7%), office staff (5%), non-profit (5%), master gardener (4%), FFA representative (4%) and others (16%) join the committee.

For about 57% of the schools, one to two teachers get their hands dirty in the school garden. Three to five teachers "dig in" at 24% of schools; six to ten at 8% of schools and 11% of schools report more than ten teachers directly participate in their garden program.

Parents and volunteers who assist with the garden number between one and two for 48% of schools, three to five at 26% of schools, six to ten at 12% of schools, and more than ten outside helpers are reported at 15% of schools.

Garden Serving Educational and Nutritional Needs

What subjects are taught in the school garden? What activities are students involved in within the garden?

Teachers have been able to incorporate many lessons from their school gardens into their varied curriculums. The subjects span the range from science (75%), horticulture (63%), agriculture (61%), arts (41%), nutrition (40%), math (37%), food systems (32%) to the less quantitative -- character development (37%), cooking (25%), health education (27%), youth development (24%), social sciences (15%), physical education (12%) and community food security (9%). One percent reported no subjects are taught and 12% reported 'other' subjects.

High numbers are reported for students' active and varied involvement in activities related to their school garden. Flower and vegetable attending earned the highest percentage of engagement with 82%, and 76%, respectively. Kids composted (66%) and worked with native plants (51%), while a little less than half did community service-related activities (49%) and greenhouse work (47%). Nutrition-related activities were reported at 38% while trees,

butterflies and fruit all accounted for 36%. Birds and worms (vermiculture) accounted for 35% of student involvement. Restoring habitat (29%) and looking after nearby ponds or wetlands ranked at 28%. Cooking the yields of school gardens pulled in nearly 27% of students. A myriad of garden-related activities were listed by respondents: garden business (18%), special needs (15%), multicultural (14%), hydroponics (12%), indoor light garden (10%), hunger (10%), intergenerational (9%), weather stations (9%), livestock (6%) and 'other' activities (10%).

Where do students eat vegetables from the garden? Does your school have a salad bar?

Most students enjoyed the fruits of their labors either right in their garden (47%) or in the classroom (41%). The school cafeteria was the setting for 13% of harvest consumption, while 23% took their food home to enjoy there. Nineteen percent reported that the students do consume what's grown in the garden and 16% of school gardens are not planted with food bearing plants. Nearly 80% of students have access to a salad bar at their school.

Funding

Did the garden project at your school receive any start-up funding? How much does the garden cost annually, not including staff salaries? Does your garden project currently receive any funding? What are the sources?

Gardens were fertilized by start-up funding in more than half of reporting schools (56%) while 25% reported no seed money and 19% were uncertain of their garden's financial beginning. To keep the gardens running annually -- taking staff salaries out of the equation -- schools (74%) invest less than \$2,000. Twenty percent of schools spent between \$2,001 and \$6,000 yearly. Four percent allocated \$6,001 to \$12,000 and 2% of schools reported spending in excess of \$12,000. More than half (56%) receive funding currently, 40% do not receive monies and 4% do not know if they receive funding. A range of sources keep the school gardens producing foodstuffs -- with monetary donations (49%), school budget (41%), grants (37%), and in-kind donations (28%) making up the bulk of the necessary monies. Sales bring in 22% of funds, while district budget (14%), PTA (10%), fundraisers (4%), FFA (4%) and teachers' pockets (2%) round out the rest of the funds.

Maintenance

Is your garden active all year? Who maintains your garden during the school year? Who maintains the garden over the summer?

Ninety-three percent of school garden organizers report that their gardens are active year-round with only 7% not operating for 12 consecutive months. Teachers (34%) and students (37%) earn the highest grades for making sure the garden grows during the school year. Maintenance is also shared by parents (11%), volunteers (9%), a gardener (6%) and maintenance staff (3%). When school is out, teachers (44%) still show up to nurture the garden most. Volunteers (17%), students (11%), parents (14%), maintenance staff (9%), and a gardener (5%) round out the labor pool.

Continuing Education/Future

Are you currently doing any assessment or evaluation of your garden program?

School garden organizers report a variety of obstacles. The top challenges as reported are: summer care (68%), time constraints (65%) and costs (63%). Practical gardening concerns and whims of nature presented many challenges – inadequate irrigation (45%), lack of supplies and equipment (32%), space (16%), lack of sun (1%), too many weeds (32%), damage from wildlife and lack of gardening knowledge (16%) were cited. Support from community and school is also mentioned as a stumbling block – lack of interest from teachers (33%), student interest (4%), district and community support (3%), vandalism (28%), and parent/volunteer participation (1%). Maintenance (1%) and lack of consistent funding (2%) were mentioned as hindrances as well. Thirty-seven percent of schools were presently engaged in an assessment of their programs and 59% were not evaluating their programs at this time.

In spite of the challenges, dedication and interest in school gardens is strong. A list of school garden workshop topics was shared with respondents who chose those that would most interest them:

76% selected *Incorporating Garden Activities with Oregon Benchmarks*

64% selected *Outdoor Classroom Management*

63% selected *How to Organize Garden Events*

48% opted for *Physical Activity in the Garden*

45% wanted *Cooking with Kids*

41% chose *Fundraising*

41% chose *How to Garden*

39% want to get started with *How to Plan a Garden*