

Umatilla High School Greenhouse Action Plan

Module 1: Mission

Our mission is to establish a Garden Club that revitalizes the greenhouse into an interactive educational space. We aim to foster student learning through hands-on gardening experiences that promote responsibility, teamwork, science literacy, and environmental stewardship. Additionally, we strive to create sustainable opportunities by using garden produce for fundraising to support school activities.

Impact Statement

This project will benefit the Umatilla community by transforming the greenhouse into a shared educational and growing space that fosters nutrition, environmental awareness, and community pride. Our goal is to engage at least 20 students in grades 6–12 through hands-on science and gardening lessons, involve at least five parents and community volunteers each year, and establish a garden committee to ensure long-term sustainability. Beyond participation, the project aims to expand knowledge of science, gardening, and healthy eating while strengthening connections among students, families, and community partners.

Module 2: Community Engagement

Timeline

Project Start: November 2025 (cleaning, irrigation repair, soil prep).

Committee Meetings: Monthly (November – May)

Key Dates: Cleaning – November

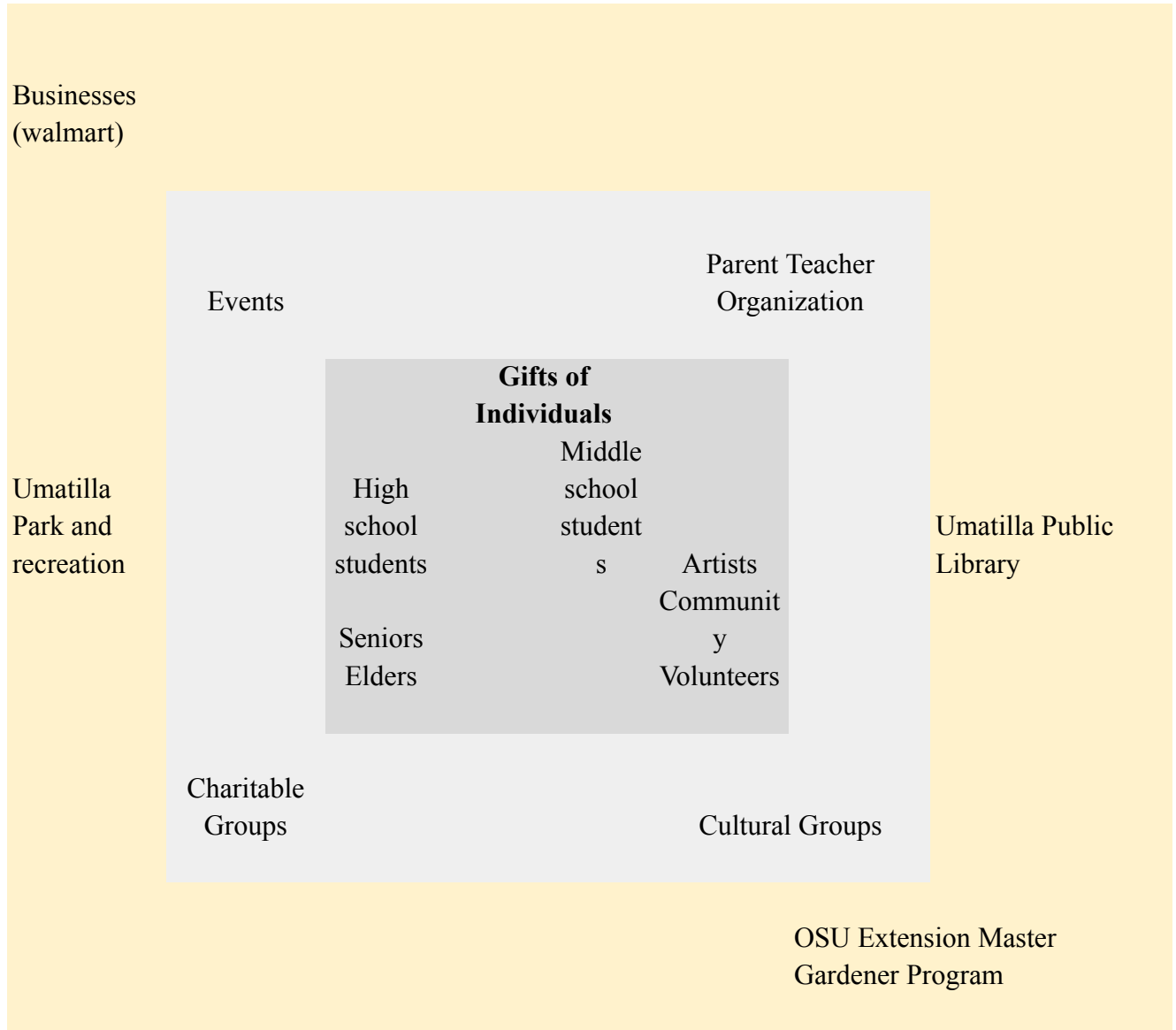
Seed starting – February

Plant & Seedling Sale – May (fundraiser)

End-of-Year Showcase – June


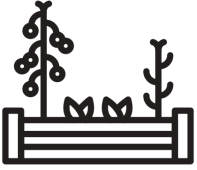
Summer volunteer rotation – June–August

Part I: Creating an Asset Map



Adapted from: *Vitalizing Communities Facilitator Guide*, 1999. J. Allen, S. Cordes, and J. Hart, p. 23

Part II: Building Reciprocal Partnerships

Partnership (Person or group) 	What can the garden program bring to the partner? ←	What can the partner bring to the garden program? →	Garden Program 
Students (high school or middle school students)	<ul style="list-style-type: none"> - Provide physical activities (reducing obesity) - Creates opportunities for kids to take part in activities that generate funds to support youth programs. - Gardening helps regulate emotions and reduce anxiety, making it especially beneficial for youth with special needs. - Family time with parents. 	<ul style="list-style-type: none"> - Maintain the garden (planting, harvesting, weeding, watering, design, selling, etc) - Contribute time and knowledge 	
Teachers (Anna Reuter: science teacher) Paraprofessional High School (Lisa Dahlin)	Use the garden as an outdoor learning space. (science, math, etc)	Connect garden activities to classroom learning	
Parents (Alicia Romero)	<ul style="list-style-type: none"> - Get gardening skills, get involved with their child's activities, outdoor time, family time. 	<ul style="list-style-type: none"> - Maintain the garden (planting, harvesting, weeding, watering, design of the garden, selling products) - Train students and other volunteers 	
Oregon State	<ul style="list-style-type: none"> - Use the garden to get 	<ul style="list-style-type: none"> -Improve and maintain the 	

<p>University Extension Master Gardener Program (volunteers)</p>	<p>their certificates (40 hours)</p> <ul style="list-style-type: none"> - Renew certifications for the current master gardeners (20 hours) 	<p>garden (planting, harvesting, weeding, watering, pest control, garden design)</p> <ul style="list-style-type: none"> - Workshops for parents and students taught by current master gardeners - Donations seeds 	
<p>School staff</p> <p>Rikkilynn Starpiler: Child nutrition director</p> <p>Lourdes Yparraguire: child nutrition coordinator</p> <p>Tina Ridings: UHS/CBMS Site-Coordinator</p>	<ul style="list-style-type: none"> - Enhances nutrition education and encourages healthy eating habits. - Report activities - Supports community engagement and youth development. 	<ul style="list-style-type: none"> - Advocate for sustainable funding and nutrition initiatives. - Provide guidance on nutrition education linked to the garden. - Manages after-school garden activities and assists teachers. 	

Module 3: Garden Design & Maintenance:

Part I: Garden Design Goals:

Goals for design or revitalization of the greenhouse:

- Restore the existing irrigation system.
- Deep clean and prepare the space for active use.
- Assess the potential to install a heating system for year-round growing.
- Improve overall functionality to support student learning and garden activities.

Simple checklist of design essentials

Does the garden have:

- Representation of students, families and the community
- Watering calendar, Irrigation: spigot location, map of irrigation,
- Water Access & Irrigation: Hose and drip irrigation system
- Safety: visibility, ground clear of tripping hazards, place to wash hands, clean: garbage can,
- Soil, delivery location/access
- Shed location: Storage for tools, materials, and signs
- Teaching & Community Use: Whiteboard or signage for lessons
- Planting & Growing Tools: Raised beds or planting tables, Seed-starting trays or pots
- Seed-starting trays or pots
- Temperature Regulation: Heating system and cooling

Part II: Maintenance Plan:

1. What are the major maintenance tasks throughout the year?

Fall (Start of School until Winter Break)	Winter (New Year until Spring Break)
<p>Growing & Planting:</p> <ul style="list-style-type: none"> • Water fall crops regularly (lettuce, spinach, kale, chard, radish, peas) • Plant: garlic, onion sets, peas, radishes, lettuce, chard, spinach • Transplant: kale, lettuce, chard <p>Maintenance:</p> <ul style="list-style-type: none"> • Cut back seed heads and remove dead plants • Mulch beds, add compost • Dismantle/store summer irrigation parts • Set up season extenders (row covers, insulation) • Check greenhouse structure (for leaks or damage) <p>Community & Education:</p> <ul style="list-style-type: none"> • Coordinate outreach for parent/community volunteers 	<p>Inside the Greenhouse:</p> <ul style="list-style-type: none"> • Start seeds: chard, lettuce, onions, leeks, parsley, rhubarb, asparagus • Care for cool-weather crops still growing (lettuce, spinach, kale) • Use row covers or thermal blankets to keep heat in • Ventilate on sunny days to avoid mold <p>Greenhouse Maintenance:</p> <ul style="list-style-type: none"> • Check for damage (cracks, leaks, airflow) • Clean tools, trays, seedling containers • Refresh or mix potting soil <p>Planning & Learning (Indoors):</p> <ul style="list-style-type: none"> • Garden committee meets to plan spring • Label seeds, make greenhouse signs • Teach lessons on seeds, soil, food systems <p>Community & Outreach:</p> <ul style="list-style-type: none"> • Organize spring volunteers • Update greenhouse board or calendar
Spring (After spring break until school year ends)	Summer (End of school year until new school year begins)
<p>Planting & Growing:</p> <ul style="list-style-type: none"> • Transplant seedlings started in winter (lettuce, chard, kale, onions) • Plant warm-season crops: tomatoes, cucumbers, basil, peppers • Start quick crops (radish, spinach, lettuce) for fast spring harvests • Continue seed starting for late spring/early summer <p>Water & Care:</p> <ul style="list-style-type: none"> • Set up or maintain irrigation system • Water 1–3x per week, depending on weather • Add mulch to retain moisture 	<p>Planting & Growing:</p> <ul style="list-style-type: none"> • Maintain heat-loving crops: tomatoes, peppers, cucumbers, basil, eggplant, small melons • Succession plant quick crops monthly: radish, lettuce (in shade), heat-tolerant spinach • Start seeds or transplant fall crops in late July–August: kale, chard, onions, broccoli <p>Water & Care:</p> <ul style="list-style-type: none"> • Water 4–5 times per week depending on weather • Monitor greenhouse temperature (cooling

<ul style="list-style-type: none"> • Weed and greenhouse paths weekly • Install or adjust shade cloth as weather warms <p>Maintenance:</p> <ul style="list-style-type: none"> • Set up trellising (for peas, tomatoes, cucumbers) • Remove row covers or season extenders (if used in early spring) <p>Teaching & Student Activities:</p> <ul style="list-style-type: none"> • Teach outdoor greenhouse lessons (garden science, cooking) • Track plant growth with student journals • Plan and host an End-of-Year greenhouse showcase <p>Community:</p> <ul style="list-style-type: none"> • Involve parent and community volunteers • Begin planning for summer watering & maintenance schedule 	<p>system)</p> <ul style="list-style-type: none"> • Weed inside greenhouse 1–2 times/month • Check soil moisture regularly <p>Maintenance:</p> <ul style="list-style-type: none"> • Add compost to beds • Inspect greenhouse structure for damage (panels, doors, vents) • Organize and restock tools and supplies (pot labels, fertilizer) • Apply biodegradable pest control sprays as needed <p>Teaching & Student Activities:</p> <ul style="list-style-type: none"> • Teach summer garden lessons 1–2 times per week (if program active) • Track plant growth and harvests • Organize student jobs and summer volunteer schedule <p>Community:</p> <ul style="list-style-type: none"> • Coordinate summer watering and maintenance with volunteers and summer school programs • Plan for fall greenhouse activities
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Who all will coordinate garden maintenance (solicit help, get donations, be in charge of maintenance, planting, harvesting)?

2. Who will help with maintenance and how often? How will their efforts be reciprocated or appreciated?

Task/Responsibility	Who	Frequency
Coordinate garden maintenance, solicit help, donations, oversee planting & harvesting	Garden Committee members	Ongoing
Weeding, planting, watering, tool maintenance	Garden Committee Members/students	As scheduled (ongoing)
Dismantle and store irrigation parts	Maintenance Worker	Twice per year

3. What tasks can be built into the learning day with students? What tasks do adults need to do?


STUDENTS TASKS	ADULTS TASKS
<ul style="list-style-type: none"> - Watering - Plant: Cover Crops, Garlic, onion sets, peas, radish, lettuce, chard, spinach - Transplant: kale, lettuce, chard - Plant care: Cut back seed heads, remove dead/old plants - Make garden signs - Start seeds indoors on February (Chard, Asparagus, chives, Leeks, lettuce, onions, parsley, Rhubarb, lettuce) - Harvest of the Month 	<ul style="list-style-type: none"> - Dismantle and store irrigation parts, trellising - Coordinate outreach for volunteers - Tool maintenance - Teach Garden lessons in classrooms - Install garden signs (specially the big ones)


Part III: Community Inspired Plantings

Harvest Calendar

Symbol Legend:

 = Sow (start from seed)

 = Plant or Transplant

 = Harvest

— = No activity

Crop	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Lettuce												
Kale												
Chard							—					
Spinach	—	—					—					
Radish	—	—			—	—	—	—			—	—
Tomatoes										—	—	—
Peppers										—	—	—
Cucumbers	—	—								—	—	—
Basil	—	—	—							—	—	—
Garlic	—	—	—	—		—	—	—			—	—
Onions (sets)					—		—	—				
Leeks				—	—	—	—	—	—	—	—	—
Parsley			—	—	—		—	—	—	—	—	—
Asparagus		—	—	—	—		—	—	—	—	—	—
Rhubarb			—	—	—		—	—	—	—	—	—
Peas	—	—				—	—	—	—	—	—	—

In addition to completing your planting plan, please consider identifying 2-3 plants that community members/students are excited about planting and using. These plants might be the same as those in your planting plan, or they might be different.

1. List your community specific plants here:

- Peppers
- Sunflowers
- Marigolds
- Zinnias
- Cilantro

2. Why will those be planted? Why do they matter to the community?

- Peppers: use for salsa
- Sunflowers, marigolds, and zinnias: sell
- Cilantro: tacos, fajitas, etc.

3. Who will plant them and are there special ways to plant them?

- **Peppers:** Planted by students and community members; start seeds indoors in trays, then transplant after frost danger passes; needs warm soil and consistent watering.
- **Sunflowers:** Planted by students during spring; need full sun and well-drained soil; easy to grow from seed.
- **Marigold and zinnias:** Planted by students and community volunteers as part of spring gardening and Mother's Day prep. Prefer full sun and well-drained soil. Water lightly and avoid overwatering.
- **Cilantro:** Planted by community volunteers and students; direct sow seeds in cooler weather or start indoors; prefers well-drained soil and partial shade in hot climates.

Module 4: Teaching Youth in the Garden:

Part I: Reflections

1. Who is going to teach in the garden? Are they paid or volunteer? How much time do they have to prepare for lessons? How much time will they have to teach?
 - Science teacher: provide a garden curriculum and teach garden lessons.
 - After school educators, summer school educators
2. Which students (grades/classes/numbers) will be learning in the garden and when (during

school hours, after school, summer)? With what frequency and for how much time?

- Grades: 6th to 12th
 - Time: school hours, after school, summer program
 - Lesson time: 30 minutes (school hours) – 45 minutes (after school) – 1 hour (summer school)
 - Number of lessons: 1 lesson/week/class
3. What are must haves for key stakeholders when it comes to what is being taught during garden sessions?

Must-Have	Why It's Important
Educational Objectives	Links to school or program goals
Life Skills	Prepares students for real-world choices
Environmental Awareness	Builds future sustainability leaders
Inclusion	Keeps sessions equitable
Measurable Outcomes	Provide program impact
Community Involvement	Strengthens local ties

4. What major topics seem to best fit the needs and interests of all key stakeholders mentioned above?
- Visit garden-observe
 - Plant parts
 - Root crops
 - Harvesting seeds
 - Soil exploration
 - Plant seeds from starts

Module 5: Funding & Making Programs Last

What will it all cost?

Item	Cost per item and how much you need?	Total cost per item
Gardening Gloves (6 pairs)	8 pack x \$14.44	\$115.52
Seed Starting Potting (12qt)	25 packs x \$11.65	\$291.25
Organic insecticide	1 unit x \$19.98	\$19.98
Plastic storage tote (6 units)	1 pack x \$62.25	\$62.25
Mobile Whiteboard	1 unit x \$99.99	\$99.99
Tray Insert - 36 Cell - 6x6 Nested (3.2 Deep)	100 units x \$1.514	\$151.45
240v Electric Heater	1 unit x \$319	\$319
Events (food)	5 events x \$50	\$250
Soil Test Kit	4 units x \$31.99	\$127.96
Marigold seeds	1 unit x \$9.99	\$9.99
Zinnia seeds	1 unit x \$7.99	\$7.99
Pots (432 units)	1 unit x \$76.03	\$76.03
Science kits	2 unit x \$307	\$614
Total per year:		\$1424.82

Ideas for fundraisers:

Plant & Seedling Sale

- Grow herbs, veggies, or flowers in the greenhouse
- Sell them in spring or Mother's Day
- Add custom plant labels made by students/volunteers

“Adopt-a-Plant” or “Adopt-a-Bed”

- Donors "sponsor" a garden bed or plant for \$10–\$50
- Include a thank-you tag in the garden with their name

DIY Garden Kit Sale

- Package small kits with seeds, instructions, pots.
- Great for kids or as gifts
- Could be made by volunteers or students

What businesses could I approach for discounted materials:

- Walmart: get discounts for garden supplies

List a few grantors, deadlines and what I will ask for:

- Umatilla school district or Farm to School program funds supplies.

How will I know if it's successful (evaluation)? What data do I need to collect along the way to be able to report back?

- Number of people participating (students, parents, volunteers)
- An established garden committee
- Number of classes or school groups using the garden
- Hours the garden is used each week

How I will share the successes of the program:

- I will share through the Umatilla school district social media.
- Umatilla library social media
- School Bulletin board