



Launch Pad Learning Garden Curriculum Overview

The Launch Pad Learning Garden is an innovative, comprehensive educational program designed to enrich K–8 student learning through four integrated curriculum arms: the Learning Garden Core Curriculum, Critter Care, Farm Stand, and Community & City/State Impact. This program immerses students in experiential, hands-on activities—ranging from horticultural science and ecosystem exploration to animal husbandry, entrepreneurial business operations, and civic action—all rooted in real-world, local context. By connecting classroom learning to purposeful gardening, animal care, business ventures, and community engagement, the Launch Pad Learning Garden cultivates academic achievement, life skills, and social responsibility, preparing students not only for academic success but for meaningful participation in their communities.

The four integrated curriculum arms are explained in detail below:

Learning Garden Core Curriculum

The Learning Garden Core Curriculum offers immersive horticulture classes, hands-on planting of diverse plant species (including both native and non-native Colorado varieties), pollinator garden exploration with a bee nursery, bird sanctuary creation, and space for interdisciplinary study topics. This approach supports academic achievement through experiential, nature-centered learning. Studies show that participation in garden-based curricula significantly increases science achievement scores and helps demystify subject matter, making it immediate and familiar for learners of all abilities. Direct interaction with living ecosystems

enriches creativity, critical thinking, and engagement, while supporting broader subject integration and environmental stewardship. Such programs are also cost-effective and adaptable to cross-curricular goals, promoting science, language arts, and nutrition learning while fostering real-life application skills. Additionally, garden-based learning increases student motivation, attentiveness, and healthy eating behaviors, which carry long-term health benefits.

Key Features of Learning Garden Core Curriculum:

- Horticulture Studies
- Pollinator Studies/ Bee Nursery
- Bird/Animal Ecosystem exploration

Critter Care

Critter Care integrates executive functioning, animal science, and biodiversity through student engagement with garden animals (Holland Lop Rabbits and Chickens). Students are responsible for daily animal care, development and research of care plans, and the study of animal behavior and life cycles. Research on executive function highlights that hands-on animal care builds skills like planning, problem-solving, and self-regulation. Systematic reviews suggest that caring for animals can enhance executive function domains in both children and adults. Moreover, the Harvard study on chores shows that regular responsibilities at home, such as animal and pet care, are associated with higher long-term academic performance by fostering independence, responsibility, and essential life skills. The process ensures students practice time management, perseverance, and adaptability, all while learning about animal welfare and biodiversity in an authentic setting.

Key Features of Critter Care:

- Animal science studies
- Executive functioning skill development

Farm Stand

The Farm Stand is a student-driven "Garden to Fork" program embedding economics, financial literacy, and entrepreneurship in a real-life context. Learners collaborate to create, propose, and execute a business plan to run a community farm stand, selling produce and eggs grown through the Learning Garden and Critter Care programs. This component provides first-hand exposure to budgeting, business planning, supply chains, customer service, and comprehensive economic concepts. Educational benefits extend beyond knowledge gains: research supports that garden-based entrepreneurship activities cultivate teamwork, resilience, and essential career and life competencies, all while connecting students to their community and supporting regional food access. **Farm Stand bridges classroom and community**, empowering students as active contributors and problem-solvers in their local economy.

Key Features of Farm Stand:

- *Economics*
- *Financial Literacy*
- *Entrepreneurship*
- *Local/Regional fresh food access*

Community and City/Regional Impact

The fourth curriculum arm amplifies equity and innovation through Larger Community and City/State Impact. The Launch Pad Learning Garden model is designed for broader dissemination through professional development, onsite field trips, guest harvests, and "micro-plotting" programs—seeding similar experiential curricula throughout the region. By supporting teachers and schools with resources, mentorship, and replicable approaches, Launch Pad serves as both a local hub for food education and a scalable template for statewide educational impact. Community-facing educational gardens have been proven to foster civic participation, create intergenerational learning, and improve regional access to healthy food

and environmental literacy, magnifying long-term benefits for both students and their communities.

Each of these curriculum arms is grounded in evidence-based practice, supporting academic achievement, executive function, financial literacy, and community connectedness. The integration of hands-on, experiential, and service-oriented programs at Launch Pad Learning Garden promises to deliver substantive, proven benefits for students, families, and the larger educational ecosystem.

Educational Outcomes

Each curriculum arm of the Launch Pad Learning Garden for PreK-12 should prioritize age-appropriate, research-backed learning outcomes that support holistic growth.

Learning Garden Core Curriculum

- **Science Knowledge and Literacy:** Students should improve in plant biology, ecology, and environmental science, gaining hands-on understanding of plant life cycles, biodiversity, and conservation.
- **Critical Thinking and Inquiry:** Learners should develop skills in observation, scientific method, and problem-solving through experiments and exploration in the garden.
- **Environmental Stewardship and Responsibility:** Students should foster care for local and global ecosystems by engaging with native/non-native species, pollinator habitats, and sustainable gardening practices.
- **Nutrition and Healthy Living:** Promote understanding of where food comes from and encourage healthier eating choices through growing and tasting fresh produce.

Critter Care

- **Executive Functioning:** Strengthen planning, organization, time management, and self-regulation by giving students daily routines and responsibilities in animal care.
- **Empathy, Compassion, and Social Skills:** Encourage personal connections with animals, leading to greater empathy, compassion, and collaboration with peers.
- **Life Sciences Mastery:** Enhance knowledge of animal life cycles, behaviors, and biology through direct observation and research.
- **Problem Solving:** Develop troubleshooting abilities as students address the needs and wellbeing of animals when unexpected scenarios arise.

Farm Stand

- **Financial Literacy:** Build understanding of money management, budgeting, and economics through real-world practice selling garden produce.
- **Entrepreneurship and Business Planning:** Guide students through business plan creation, marketing, and operations, fostering innovation and initiative.
- **Teamwork and Communication:** Emphasize collaboration, leadership, and interpersonal communication through shared business responsibilities.

- **Civic Engagement and Community Service:** Link academic learning to community needs by supplying fresh food to local residents.

Community and City/State Impact

- **Civic Responsibility and Service Learning:** Instill lifelong values of civic participation, volunteering, and public service through involvement in school and community-based programs.
- **Collaboration and Networking:** Encourage connections with students, families, educators, and local experts to expand learning beyond the school walls.
- **Advocacy and Leadership:** Foster student voice in advocating for sustainability, food security, and experiential education within the school and wider community.
- **Real-World Application and Reflection:** Enable students to understand their impact, reflect on service experiences, and connect their learning to societal needs.