

# Academic Learning in Home-Based Activities



## Academic Learning in Home-Based Activities

Children learn best by exploring their world at their own level of understanding with toys and projects that will facilitate learning in many different ways. Parents can select toys that reinforce social and emotional skill development through situational play, games, and books. These may include situational play activities when constructing houses and communities with building blocks, Tinker Toys, Lincoln Logs, Magna Tiles, Lego, and other construction materials. Preschoolers and younger elementary age children love to play house, cook, be a fireman, respond to emergencies, play doctor, and create construction sites with various props and relevant toys. Older elementary school-age children and teens love to play Monopoly while they invest in properties, the game of Life as family members make life plans, and the game of Clue as they solve a murder mystery. There are a multitude of books that help children learn about how to manage feelings and challenging social/emotional situations at home and

school.

## Home Projects

Parents and children can reinforce academic learning by engaging in the following home projects:

Researching and writing your family's history with historical family photos and publishing a family history book as a holiday gift

Creating travel books on various vacations, countries visited, or places you would like to visit and learn more about as a family

Researching the production of a favorite food in different countries and comparing different types of farming and food production processes

Learning about a family member's injury, illness, or disease and the various types of treatments

Researching different careers, colleges, and courses required for a particular profession

Helping your children plan a meal plan and the food budget for a meal or for the week

Having your children compare food prices and the nutritional content of different foods when grocery shopping

Opening a savings account at a bank for each child

Asking teens to compare the costs of various cell phone plans

Having teens plan the family vacation by comparing the costs for lodging, meals, travel options, and attractions

Observing nature, studying insects and animals, and comparing the changes at different intervals and

seasons

Playing with water by observing sink and float activities, constructing water and mud bricks, and creating water and mud huts

Studying seasons and the variations in climates and weather patterns

Celebrating holidays with art projects that include making greeting cards and creating decorations

Constructing a family vegetable garden that includes creating the garden, planting seeds that will grow well in your neighborhood, and managing garden pests, fertilization, and watering

## Student Led Learning

When we include our children in the planning and development of a family need, they can explore the project's learning steps at their own pace. For example, when constructing a backyard vegetable garden, an elementary school age child can help calculate the various amounts of materials that must be purchased for the project. A middle school child can bargain shop and compare lumber and material costs at various hardware stores. And a high school student can research how to manage pests, fertilize, and water the garden in an environmental sensitive way.

These garden preparation activities can reinforce your children's academic learning in language arts, math, and science. Additionally, your children can keep a journal about their experiences when researching options and watching the vegetables grow at different times of year. This family-focused project can also support your

children's social-emotional growth as they coordinate family responsibilities that contribute to the family's daily meals and nutritional needs. When children learn to create and eat healthy meals at an early age, they tend to reinforce these healthy behaviors throughout life.

## Sample Worksheet

The sample worksheet on the next page illustrates how the Li family planned and created their background vegetable garden with their three children.

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### Family Project: The Li Family Vegetable Garden

List the 5 primary activities to complete with assigned family members:

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1. Dad and Chen, a 4th grade student, will calculate materials to purchase for the vegetable garden.
  - Reflective learning: I learned how to calculate totals for lumber and materials.
  - How this applies to my academic learning: I multiplied and converted measurements of materials that can be purchased.

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2. Bo, a 7<sup>th</sup> grade middle school student, will create a materials comparison cost spreadsheet from three building and supply stores.

- Reflective learning: I was able to create a comparison spreadsheet of costs to determine the best value for each item that needed to be purchased for the project.

- How this applies to my academic learning: I just learned how to create and use an Excel spreadsheet for math problems.

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3. Biyu, an 11<sup>th</sup> grade high school student will research how to manage pests, fertilizing, and watering the garden in an environmentally sensitive way.

- Reflective learning: I researched environmentally sensitive fertilizers and watering options on the internet. I discussed fertilizer options with family members to determine the best use for our garden.

- How this applies to my academic learning: I am studying environmental science at school. I'm learning how to manage pests in environmentally sensitive ways.

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4. The entire family will construct the vegetable garden. They will alternate garden care on a weekly rotational schedule.

- Reflective learning: We are learning how to work together on a family project that benefits all family members.

- How this applies to my academic learning: We can apply relevant learning to each family member's academic learning experiences.

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5. The family will plan for year-round replanting and garden care at their weekly family meetings.

- Reflective learning: We are learning how to plan for a year-round vegetable garden that we can use for meals.

- How this applies to my academic learning: We can use these experiences in new academic areas at school.

## Success Reflections

As the family expands their responsibilities in the garden, family members report their successes and challenges at weekly family meetings. Some ongoing challenges reported include new insect infestations during different seasons and the need to adjust watering with little or no rain.

Much success as you can enhance home projects by applying what you are learning at your children's school to your family's daily activities.