

Gardening Creates Better Community for Inter-generational Living

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"Green fingers are the extension of a verdant heart." Russell Page

Abstract

Horticulture has been regarded as the number one leisure activity and provides wonderful opportunity for exercise and socialization (Larson & Meyer 2006). Preliminary research has found that adult participation in gardening results in significant improvement in physical health (Shoemaker & Lin 2008), as well as mental health by creating feelings of pride, competence, and satisfaction (Larson & Meyer 2006). Similarly, it is also beneficial for younger generations to be involved in gardening to stay healthy while learning lessons about accountability, nurturing, and responsibility (Larson & Meyer 2006). Intergenerational gardening improves physical, emotional, and spiritual well-being for all participants (Larson & Meyer 2006). Gardening with younger generations enables the baby boomer generation to take part in an energetic and nurturing atmosphere. Also benefiting, pre-school children receive the care and attention they need while aiding aging citizens in physical tasks. Intergenerational community gardening not only helps aging people to stay healthy with moderate exercises, but also educates the younger generations about plants and responsibilities. It is suggested that the positive results of gardening can apply to all members of a community. This project will explore architectural approaches influencing the social behavior in green spaces to create a mutually beneficial and educational community for inter-generation living. Main research methods are to collect information and benefits about intergenerational gardening and synthesize them into a model for intergeneration housing design.

- ## Goals
- 1 Explore design possibilities to encourage multiple generations to garden.
 - 2 Choose the best type of garden suitable for Seattle community.
 - 3 Define how gardens contribute to the inter-generational living.



Benefits for Older Generations

- 1, gardening can promote positive self-esteem;
- 2, gardening can inspire elders to continue use their brains;
- 3, gardening can instill pride in one's abilities;
- 4, gardening brings comfort to a person with familiar scents or scenes;
- 5, gardening can pass the wisdom and experience to other generations;
- 6, gardening can significantly improve elderly's physical health;
- 7, gardening provide a leisure activity for retired people.

Benefits for Younger Generations

- 1, gardens can provide a safe environment for children to play;
- 2, gardening can teach children positive social and inter-personal skills;
- 3, gardening can encourage children to eat more healthy vegetables;
- 4, gardening can teach children about patience and life circle;
- 5, gardening can promote a positive learning attitude;
- 6, gardening can provide children an opportunity to learn from elders;
- 7, gardening can improve physical health of children.

Benefits for Communities

- 1, gardening can bring the generations together;
- 2, gardening can mutually benefit both children and elderly;
- 3, gardening can provide a social place for different tenants;
- 4, gardening can benefit the whole community with produce;
- 5, gardening can develop close relationships between generations;
- 6, gardening can provide surveillance for children and properties.

Roof Garden



Case study: Eagle Street Farm

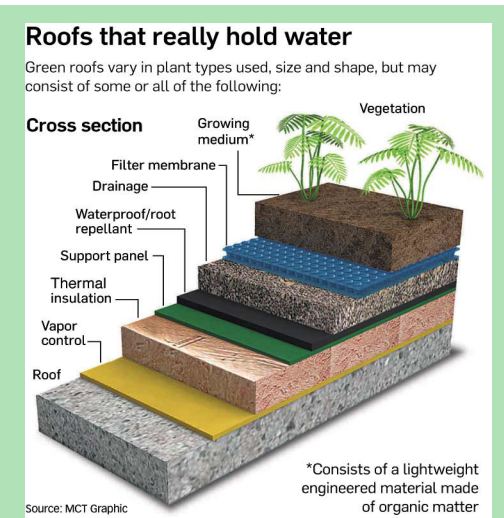
Advantages:

- 1, roof garden provides adequate sunlight;
- 2, roof garden can help insulate the building and prevent runoff;
- 3, roof garden provides more privacy and safety.

Disadvantages:

- 1, roof garden requires larger media for plants like trees;
- 2, roof garden requires access towards roof with elevators;
- 3, roof garden requires more facilities for irrigation and mechanism.

Roof garden will be best suitable for small size eatable plants, and those that require more sunlight like flowers. Roof garden is a sustainable design strategy to hold the rainwater as irrigation and cool the building in the summer time. In terms of the layers of medium putting on the roof surface, a steady structure system is required for roof garden.



Courtyard Garden



Case study: Copenhagen Dorm

Advantages:

- 1, courtyard garden is able to grow large fruit trees;
- 2, courtyard garden does not require lots of maintenance;
- 3, courtyard garden provides easy access for all residents.

Disadvantages:

- 1, courtyard garden tends to get less sunlight w/ more than 5 stories;
- 2, courtyard garden lacks of privacy with public access;
- 3, courtyard garden tends to get stepped on a lot.

Courtyard garden will be best suitable for large size trees to get more sunlight, and those eatable plants that require less sunlight like mushrooms. Courtyard garden is not the best option for farming garden. It will serve the community best as a zen garden for people to rest and meditate.



Vertical Garden



Case study: Tacoma Goodwill

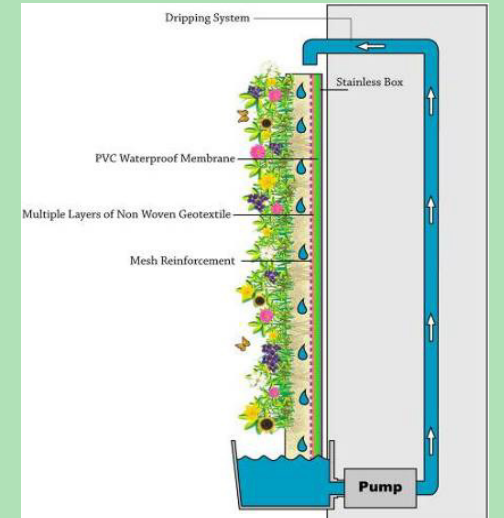
Advantages:

- 1, vertical garden saves space, make use of walls or vertical columns;
- 2, vertical garden does not require lots of maintenance with built-in irrigation;
- 3, vertical garden helps to make fresh air and moderate temperature.

Disadvantages:

- 1, vertical garden tends to grow small size plants like bushes;
- 2, vertical garden tends to treat as a symbol rather than a garden;
- 3, vertical garden tends to get uneven sunlight with vertical layout;
- 4, vertical garden is hard for interaction of people with plants.

Vertical garden will be best suitable for small size plants that require least amount of sunlight. It will require lots of mechanism for initial installation, but it will be more self-running later on. The interaction between people and plants will be reduced by this feature of vertical garden. Vertical garden is more like a painting for people to hangout behind it or for sustainable reasons.



Balcony Garden



Case study: Milano Santa Monica

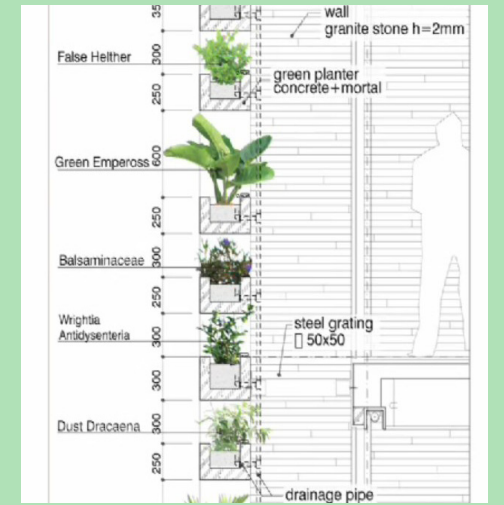
Advantages:

- 1, balcony garden shows personal characteristics of residents;
- 2, balcony garden does not require too much maintenance with pot plants;
- 3, balcony garden brings nature close to the units and the community;
- 4, balcony garden circulates fresh air into the building.

Disadvantages:

- 1, balcony garden tends to grow small plants in the pot or planters;
- 2, balcony garden compromises resident's privacy;
- 3, balcony garden is hard for visitors to interact with plants.

Balcony garden will be best suitable for small size plants that can be placed in a pot or a planter. It will not require lots of maintenance except watering on a daily basis. The interaction between people and plants will only be limited by the acquaintances of the owner. But visitors still can enjoy the diversity of vegetations on each balcony and interact with the owner while he or she is out there taking care of the plants.



Research Methods

Literatures about horticulture in general to encourage better lifestyle and promote healthy conditions.

Case studies with gardens to unify the community and create a better environment for living.

Current researches about how inter-generational gardening benefit both parties and the community.

Summary

Amateur gardeners should never be forced but always encouraged and while introducing the activity, with the end product in hand can be effective in getting attention and encouraging participation. Having a comfortable space free from distractions will make participation more enjoyable. Educating aging people how important gardening is to promote healthy lifestyle. On the other hand, children will love to have a place to play just need the extra attention on them to make sure they don't get hurt. By taking care of the children in the garden, elderly will enjoy grow plants to stay healthy while the families with children don't need to find another daycare for young children. Based on the advantages and disadvantages of different types of gardens, roof garden will be most suitable for eatable plants farming. Elderly and children can use the roof top farm garden as an alternative daycare to stay healthy and active. Also, the courtyard garden will be most suitable as a zen garden for residents to communicate and take a walk. Located near the entry, the courtyard garden with trees will also be ideal place to walk a dog and become an extension of the existing park on the west. Furthermore, vertical garden might also be used to strengthen the courtyard garden with waterfall to create an asian zen garden feeling. Community will benefit not only on the process of gardening to set up an alternative daycare, but also make use of the harvest. Shared meal by using fresh produce from the rooftop farm will be a great opportunity for community members to know each other and children will tend to eat more vegetation which they are involved. Farmer's market could be set up for the neighborhood to sell extra produce from the rooftop farm, saving money and time for residents.

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