

How Can Early Care and Education Gardens Be Sustained?

Lessons Learned from SAGE

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Gardens for Learning

- Gardens have become popular as educational tools in the US
- Sustainability via Active Garden Education (SAGE) changed the environment to meet US health and education standards with a garden-based curriculum and training
- This study investigated strategies to enhance garden sustainability



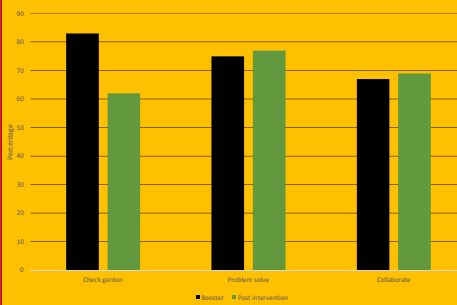
Methods

- 12 raised gardens (1.2m X 1.8m) in ECECs
- 8-wk garden-based curriculum
- 90 min teacher training and week 5 booster session
- Garden sustainability strategies
- SAGE 1, ECECs (n=4) received funds (\$200) to use for future garden care
- SAGE 2 (n=2) received no sustainability training
- SAGE 3 ECECs (n=6) received brief training on watering, caring for the garden, and seed conservation
- Cost was estimated for materials and hours involved in garden installation
- Garden assessments were conducted at baseline (T1), after the garden-based intervention (T2), and at 3-month follow up (T3)
- SAGE 3 teachers (n=12) completed measures of self-efficacy to maintain the garden at week 5, and T2

Results

- Garden cost ~\$292 USD per center
- Installation was 1 hour
- Water cost <\$8 USD per center per year
- Gardens were watered during 93% of SAGE sessions (about 2 per week)
- Centers that received modest funds or no strategies were not maintained after the study ended
- 75% of gardens retained at follow up

Teacher Garden Self-Efficacy to Always Attend the Garden

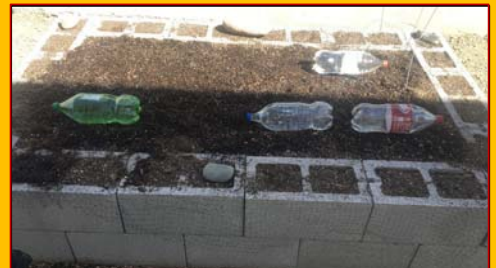
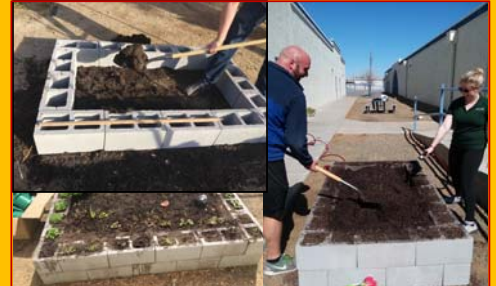


- Reasons for lack of garden success:
 - Poor soil
 - Poor water access
 - Teacher walk out
 - Cats
 - Children pulling seedlings



Discussion

- Maintaining gardens requires more than financial support
- Center teachers and personnel must be trained and supported
- Community partners and partnerships could be an additional strategy to improve sustainability



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