

## How are vegetable/herb gardens used, managed and resourced in Australian primary schools? A mixed-methods study

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School vegetable/herb gardens have the potential to provide learning benefits across a range of educational domains, such as social and emotional development, acquisition of food and nutrition knowledge and skills and environmentally sustainable practices, as well as opportunities for experiential and cross-curricular learning.<sup>(1–3)</sup> The aim of this study was to describe how school vegetable/herb gardens are used, resourced and maintained throughout the school year. A convenience sample of 111 primary school staff who were working in an Australian primary school completed an online survey. To gain a more in-depth understanding of school gardens, 13 Victorian primary school teachers were then recruited via Facebook to participate in a 30–40-minute semi-structured phone/Zoom interview. The interviews were audio-recorded and professionally transcribed. Data from the online survey were analysed using descriptive statistics to describe how school gardens are used. Template thematic analysis was used to analyse the interview data. Of the 111 survey participants, 100 worked in schools with a vegetable/herb garden. Those looking after the school garden included students (75%), teachers (57%), a garden specialist (27%), parents (23%) and shared amongst staff (19%). Students were involved in planting and growing (98%), harvesting (96%), eating the produce (83%) and cooking the produce (70%). Thirty-four percent indicated that garden activities are incorporated into the food and nutrition curriculum ‘a lot’, 44% said it was incorporated ‘a little’ and 22% said it was not incorporated into the curriculum. Use of the garden in the curriculum most frequently included explaining about healthy eating (86%) and environmental sustainability (86%), followed by building teamwork (82%) and social skills (73%), teaching food skills (73%), and explaining principles of nutrition (59%). For the schools that did not have a vegetable/herb garden, the most frequent reasons were lack of funding and lack of support or interest. Preliminary analyses of the interview data support the findings of the survey. Furthermore, the findings suggest that the knowledge and skills learnt in the garden extend beyond those related to health and the environment and include aspects of other curriculum areas such as STEM, design and literacy. Most participants suggested that once the initial setup of the garden was complete, it did not cost too much to maintain with many using sustainable practices such as composting, seed saving, utilising rainwater tanks, and selling produce to raise money to put back into the garden. Several participants also described that they often applied for grants and that supplies were often donated to the school garden from various sources within their community. This study shows that school gardens are generally low cost and provide opportunities for students to develop knowledge and skills across several domains, however lack of time is a major barrier.

### References

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