

Becoming better people: Children's perceptions of how a school's garden program has impacted their actualisation of values

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Abstract

Education is perceived, among other things, to be a character-building enterprise. Since the beginning of the twenty-first century, a renewed emphasis on character development through values education has been on the agendas of Australian schools. Many schools now offer programs designed to inculcate values into the lives of students. Although values literacy is widespread in schools, there is less evidence to demonstrate that values actualisation, that is, making positive values the basis of behaviour at school and in life, has taken root. This case study in one primary school used focus groups to gather children's perceptions of how they actualised values in the context of a school garden program. The garden program's organisational elements were found to positively impact the actualisation of intrapersonal and interpersonal values.

Context

Character is the fabric of a person's life. Although the physical body performs actions, it is the brain that determines what those actions will be, from the simple opening of the eyes to more complex actions that require decision making. Over time, the choices made, particularly in the areas of morals and ethics, determine how a person lives their life. The outward expression of these choices is known as a person's character. Inseparable from character are values, which may be defined as "ideas that

manifest themselves in concrete behaviour" (Christian, 2014, p. 16). Therefore, values are the building blocks of character. Many values, including compassion, perseverance and excellence, are esteemed widely across cultures and faiths (Popov et al., 1997). Children adopt values in their own lives through the influence of families, faith traditions, society, culture and education. From an educational perspective, teachers have always played a role in the development of values whether through modelling, teaching or providing an environment in which to enact them (Haydon, 2006).

In recognition of the important role of values education in Australian schools, the Australian Government (2005) produced a set of resources designed to support schools in the values education process. The definition of values used as a basis for these documents came from Halstead and Taylor (2000) who stated that values are "the principals and fundamental conviction which act as general guides to behaviour, the standards by which particular actions are judged as good or desirable" (p. 162). In preparing this set of values education resources, twelve schools were put forward as case studies to demonstrate how values were embedded in the ethos or mission of the school, fostered through engagement in civic and social skills, and integrated into the curriculum (Australian Government, 2004). Australian schools rose to the challenge of values education and many adopted school-based approaches to teaching their students about values and encouraging children and adolescents to enact their school's values in the learning environment. Although values

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education has continued, research evidencing the actualisation of values is limited.

Character and values

Character has always been at the forefront of human endeavour. The importance of character is highlighted in quotes from history. Of character, Socrates (Libquotes, n.d. a) wrote “I believe that we cannot live better than in seeking to become better” and Heraclitus (Brainyquote, n.d. a), “Character is destiny.” In addition, Abraham Lincoln (Libquotes n.d. b) once said, “Perhaps a man’s character is like a tree and his reputation like its shadow. The shadow is what we think of it; the tree is the real thing”, and Eleanor Roosevelt (Brainyquote, n.d. b). believed that character is built by people growing “through experience if they meet life honestly and courageously.”

In education, the promotion of values has a long history. John Dewey believed that values develop through positive habits which Heilbronn (n.d.) claims “enable the child to experience and experiment with behaviour that is socially and personally beneficial” (p. 3). Although sometimes maligned for his views on moral education, Dewey argued against the imposition and conformity of behaviour, instead promoting an environment where the will is independently exercised (White, 2015). Paulo Freire, Carl Rogers and Janusz Korczak are presented by Woolley (2013) as forward-thinking educators who promoted skills for their present time and for the future. These critical skills aligned with personal attributes such as curiosity, collaboration and confidence. Ellen White (1903), an inspirational Christian author from the 19th century, wrote to teachers that “Character building is the most important work ever entrusted to human beings” (p. 225); a statement that resonates with educators today (Brady, 2008; Lovat et al., 2009).

While there is agreement on the importance of values education in schools, there is less consensus about how values education should be approached. Brady (2008) has outlined four approaches to teaching values: the Trait approach, the Cognitive Development approach, the Values Clarification approach and the Role Play approach. The Trait approach is based on the premise that pre-determined traits, or values, are absolute and can be taught both explicitly and implicitly through exploring the lives of historical characters who epitomise the desired values (Brady, 2008). This approach stops short of an intentional strategy to transition students from learning about another’s values and adopting the values as their own.

The Cognitive Development approach, based on Kohlberg’s (1975) stages of moral reasoning, is

defined by three distinct stages: pre-conventional, conventional and post-conventional. The pre-conventional stage starts with following rules to avoid consequences and progresses towards the post-conventional stage of choosing values based on inner consistency with beliefs (Brady, 2011). This approach identifies stages that move students beyond values literacy to internalising values for life but appears to be a chronological progression during which values are caught rather than taught. Therefore, the Trait approach, and to a certain extent the Cognitive Development approach, start with pre-determined values.

The Values Clarification approach, developed by Rath et al. (1978), is based on the principles of ‘values relativity’ (Brady, 2011) and relies on students choosing their own values and beliefs, and adopting those that are personally meaningful. This, it is proposed, occurs through a process of choosing values based on evidence, prizing values by publicly affirming one’s choice and acting on values by repeatedly enacting one’s choice (Brady, 2011). While criticised by those who favour providing pre-determined values to students (Brady, 2011), the strength of this approach lies with the requirement to act on one’s chosen values and so opening opportunities to form positive values-driven behaviour.

Role Play, the final approach identified by Brady (2011), is a social method involving values used in role play situations. It is an approach where briefing and debriefing with the teacher forms an important part of the process and reflection, either individually or as a class, prompts discussion and further enactment in role play situations. Although this approach requires students to enact values, it does so in a simulated context rather than in a real-life setting.

Two additional approaches are worth mentioning. Ferreira and Schulze (2014) conjecture that initiatives have done little to advance the effective implementation of values in education, and propose a Constructivist approach of active, socially constructed learning in open-ended contexts that most closely supports the Values Clarification approach. Aligned to the Role Play and Trait approach is the narrative approach which uses literature to stimulate discussions and learning about values (Pearmain, 2007). To her credit, Davy Pearmain also suggests follow up activities including how to turn the “story ideas into action” (p. 17).

Lovat et al. (2009), rather than promoting a specific approach, identify three crucial components they consider should be built into values education: ‘head learning’, ‘heart learning’ and ‘hand learning’. Without all three components,

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they posit, values education approaches will miss their mark. Head learning is values literacy, or knowledge, and understanding of values. Heart learning includes the social awareness of values that leads to prizing the values and therefore motivates behaviour. Finally, hand learning is experiential learning which involves “action based activities where students can apply their curriculum learning in direct service to others” (p. 119). Others concur, citing the importance of offering an environment where children learn to enact their values (Althorff & Berkowitz, 2006; Christian, 2014; Clement, 2010; Knowles, 2012; Marks et al., 2015).

The different approaches to values education described above lead to the bigger question of “How does one measure the effectiveness of values education?” Clement (2010) offers that the actualisation of values provides an answer. Clement defines actualisation as the reality of values played out in the school setting in such a way that values become part of the school culture and ethos; that is, being known, prized, and practised by staff and students. He maintains that “Taking values to the heart of educational endeavours begins with valuing and orchestrating those conditions wherein students can develop agency across personal, social, academic, spiritual and moral domains” (Clement, 2010, p. 1). Further, he posits that the actualisation of values is essential to student wellbeing and that “student wellbeing is a positive observable outcome of the implementation of values as they are embedded in educational policy, leadership administration, and the explicit and hidden curriculum”, as well as “pedagogical practices and the web of relationships amongst the various stakeholders of a school” (p. 26).

School garden programs and values education

School garden programs could be what Clement (2010) calls orchestrated conditions; learning environments that offer opportunities for children to enact a wide variety of values and develop personal agency. Schools operate garden programs for a variety of reasons. Rationales for school garden programs include environmental, educational, nutritional, experiential, social and wellbeing reasons (Beery et al., 2013; Blair, 2009, Ohly et al., 2016).

Although studies of intentional links between school garden programs and values education appears limited, there is evidence that points towards the efficacy of school gardens as environments conducive to the development of values. Passy (2014) posits that garden programs contribute to the “social, academic and emotional development” of children (p. 36). Broadly speaking,

the social, academic and emotional domains have the potential to foster values such as empathy, perseverance and self-control, but regarding values education, it is the social domain that has attracted the greatest attention in the school garden literature. This is based on the premise that gardening is a social activity and therefore promotes interpersonal relationships through opportunities to engage in teamwork, which encourage cooperation, empathy and the skills required for conflict resolution (Austin, 2021; Blair, 2009; Dyg & Wistoft, 2018). Teamwork also acts as a springboard for developing other values, including responsibility and perseverance (Cairns, 2017), while Moore et al. (2015) claim that ‘working’ in a school garden assists not just in the development of values but also ethics.

One salient point is that school garden programs are experiential in nature and therefore enable children to enact their values in practical ways. According to Clement (2010), the optimal environment for children to actualise values is one where they can practise values. Despite the potential link between school garden programs and the actualisation of values, there have been few studies that intentionally explore the relationship between the two. Therefore, this study explored the role of values in one outdoor learning environment using a primary school’s garden program as a case study. The aim was to discover, from the students’ perspectives, whether the garden program contributed to them becoming better people, that is, whether positive values were being actualised and how this was evident.

Methodology

The overarching question for this investigation was, “What influence, if any, does one school garden program have on children’s perceptions of the actualisation of values?”. This question determined the qualitative paradigm used for this study (Borrego et al., 2009). As children were the sole respondents in this investigation, strict ethical guidelines were followed when collecting data.

The site for this investigation was a small Christian primary school with an ongoing school garden program. One day each week, all students, ranging from five to twelve years of age, assembled in the garden and were directed to activities where they spent the next 45 minutes. There were three organisational elements to this garden program: heterogenous (i.e. mixed-gender/age) groups, collaboration and authentic real-life learning. Children worked in one of five authentic learning activity groups: garden care, market garden, kid’s kitchen, chicken care and garden planning. The

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groups rotated each week allowing children to participate in each garden activity at least twice in each of four school terms. Group membership was changed each term and was comprised of mixed-aged children. Details about this school's garden program is further outlined in Williams et al. (2020).

This investigation was embedded in a larger qualitative case study exploring broader curriculum links to the garden program. The data used in this investigation was drawn from four student focus groups, each containing six children (n = 24 children total), and corresponded to Kindergarten (ages 5-6 years), Grades 1-2 (7-8 years), Grades 3-4 (9-10 years) and Grades 5-6 (11-12 years). Focus groups, according to Jayanthi and Nelson (2002), are a good fit for school research and the topic under investigation as they allow researchers to gain insights into both what is happening and why it is happening. The focus group membership for this study was negotiated with the teachers, and participating students had the opportunity to meet the researchers facilitating the focus groups during their garden sessions to ensure they felt at ease with them (Litosseliti, 2003; Smith, 2008). All focus groups discussed general open-ended questions regarding the activities and outcomes of the school garden program. The Grades 3-4 and Grades 5-6 focus groups were also asked to respond to a question asking whether their involvement in the school garden program has made them a better person and how they felt when they were working in the garden. Probing and clarifying questions were asked where necessary (Litosseliti, 2003).

The data was analysed by coding the focus group transcripts (Charmaz, 2014). Initially, two types of data emerged. First, values were recorded based on responses of Grades 3-4 and Grades 5-6 children to the question asking whether their involvement in the school garden program has made them a better person. Second, the remainder of the transcripts were coded using a line-by-line approach to identify examples of where values were enacted, based on the responses of the children to general open-ended questions about the activities and outcomes of the school garden program. This resulted in two sets of values: those identified by the participants and those identified by the researchers. A further stage of analysis involved the values identified by the children and the researchers being grouped then organised into categories which were further collapsed to form two overarching themes (Charmaz, 2014). The emerging values were also mapped to the organisational elements of the garden program to understand where, and how, the values were actualised.

Findings: Children's perspectives of values literacy and actualisation

Two types of data emerged from the focus groups. Primary data emerged from children in the Grades 3-4 and Grades 5-6 focus groups when asking whether their involvement in the school garden program has made them a better person. To this question there was an overwhelmingly positive response. These children were able to articulate their answers using values as labels and gave examples demonstrating how their garden sessions helped to build their character. The children identified these values by name: patience, cooperation, care, kindness, helpfulness and understanding. Secondary data was identified from the children's descriptions of the activities and outcomes of the school garden program.

Identified values fell into several categories from which two broad values themes emerged: intrapersonal values and interpersonal values. Intrapersonal values can be developed without relying on interaction with others, but they still impact the child's behaviour. In contrast, interpersonal values are only visible when children interact with others. The only value to be both interpersonal and intrapersonal was care. Which category care was placed in depended on to whom, or to what, the care was expressed. The intrapersonal values of care and patience were self-identified by the children and are identified in Table 1 by an asterisk. Other intrapersonal values were within the scenarios described in the focus groups.

Theme 1: Intrapersonal values

Of the intrapersonal values (Table 1), twelve comments related to **care** and this value emerged in transcripts the most frequently. These comments ranged from tool care to caring for God's creation, as in this comment from a Kindergarten child, "*It takes a lot of care to keep the buggies away without insecticides*", while another child offered, "*We care for it [the garden] and it grows well*". Five of the comments relating to care did not provide a context.

Seven comments related to **excellence** or doing their best at whatever task they were given (Table 1). One child commented,

When we built the chicken coop, we had to follow the instructions and the measurement to build it and we had to look for the right screws ... otherwise we might find that we had a screw that was too long that would go through and split some wood, or you might have something too short that can't actually hold onto and bite into the wood.

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Table 1: *Intrapersonal values identified from focus groups, including their frequency of mention and context in which they were identified*

Intrapersonal value	Frequency	Context
Care*	12	Caring for tools, caring for God's creation, or no context given
Excellence	7	Building the chicken coop, filling orders, counting out change, keeping records, measuring amounts, recording rainfall data on graphs
Perseverance/ Diligence	4	Weeding, moving wheelbarrows full of compost, recording data from garden activities, doing some activities again and again
Patience*	3	Waiting for plants to grow
Responsibility	2	Taking responsibility for whatever task their group is given or no specific context given
Self-control	1	When to do something and when to hold back
Willingness to learn	1	Listening and learning about new things

* Indicates this value was self-identified by focus group members

Closely related to excellence were **perseverance** and **diligence**. All children were allotted set tasks to do during the garden sessions and some of these tasks, including weeding and using a wheelbarrow to move compost, called for greater levels of perseverance than caring for the chickens, for example. One child shared that some garden activities were helping him to persevere, *"I like everything [garden activities], but I don't like doing it, you know, again and again"*. Diligence was also displayed in the recording of weekly data.

We have a little book ... and we have all of our days, all of our terms, the weather, the temperature, the soil temperature, the air temperature, how much produce we picked, how much money we made, and we record everything we do in the garden. And we also have, like, a

digital copy just in case we lose the book.

Three comments related to **patience**, with one child reflecting, *"It [the garden] teaches you a lot of patience"*. This comment was made in the context of waiting for the potato plants to grow. **Willingness to learn** and **self-control** both attracted one comment each. The comment relating to self-control implied the child had to exercise a choice of when to do something and when *"to hold back"*.

Theme 2: Interpersonal values

The second theme to emerge was interpersonal values (Table 2.) which are enacted when children interact with others. The interpersonal values of cooperation, care, kindness, helpfulness and understanding were self-identified by the children and are identified by an asterisk in Table 2. Other

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Table 2: *Interpersonal values identified from focus groups, including their frequency of mention and context in which they were identified*

Intrapersonal value	Frequency	Context
Cooperation*	10	Working in groups, working with teachers and volunteers
Respect	8	Working in groups, listening to others
Generosity/Stewardship	6	Paying tithe on the market garden shop sales each week, adding an extra potato to orders
Care*	5	Caring for each other, especially those who are younger
Kindness*	4	When working in groups
Helpfulness*	4	When a task is too big for one person to handle. Helping younger children
Honesty	2	Giving the correct change to customers
Understanding (of others)*	1	When working with younger children

* Indicates this value was self-identified by focus group members

interpersonal values were those extracted from the garden scenarios described in the focus groups.

Of the interpersonal values identified, ten related to the value of **cooperation** (Table 2). Comments included, “I learnt, you know, how to work ... together with other people through [the] garden [activities]”, and from a child without much interaction with younger children outside of school,

But I don't, like, really get involved with that younger age bracket, but in the garden I've got people from pre-kindy and kindy in my group, and you learn to actually know what they're like, how they work really well, but they're not so good at [the activities] so you can kind of help them with that and then they help you as well, like understand some other things from others' points of views.

This comment reflects the child's awareness of how working with younger children was developing both understanding of younger peers and fostering cooperation between age groups.

Respect also featured as a separate value with eight instances cited. This included both respect for property and respect for others. Respect for others is a precursor to cooperation and is therefore linked to it. Six references were made to **generosity**, which is mostly centred around the topic of paying tithe (e.g., “We also pay 10% tithe”), but it was also evident in the practice of weighing the potatoes and then adding an extra one to the bag. As one child stated simply, “I have learned to give”. There were instances where kindness was evident and this was one of the areas where a child had responded to becoming a better person as, “You have to be kind to each other”. Another child commenting on **kindness** related it to “the Fruits of the Spirit” from Galatians 5, and stated, “because in one of our Bible classes we learnt that each fruit represents one [value]”. The children could also identify values in the behaviour of others with a young child saying,

It's really good to have the bigger kids because they really help us a lot. When we need help, kindness, and that, we just call out for them, and they just come to help us. That's really helpful of them and I really like them.

Values and organisational elements

Tables 1 and 2 demonstrated the variety of activities in which values were identified. The three organisational elements of the garden program (i.e., heterogeneity, collaboration and authentic real-life learning) were mapped to the values to identify if they had any bearing on the values that were

identified. It is important to note that none of the organisational elements were mutually exclusive to any of the garden activities.

Heterogeneity

This organisational element was featured in the school garden program by having each group of children comprising of mixed genders and ages. Where pairing within groups occurred, such as following a recipe, younger and older child were paired to work together. This organisational element linked to all the values but was particularly noticeable through the values of **respect**, **care**, **understanding**, **helpfulness** and **kindness**.

Collaboration

The second organisational element of collaboration, also called cooperation by the children, was a strong element evident in the children's descriptions of six activities built into the weekly garden program: filling orders and counting out change in the market shop; weeding, shovelling and moving compost in the garden; and cooking in the kitchen with their partner. The children identified with this collaborative component requiring teamwork for task success. The values most associated with the organisational element of collaboration in these activities were **cooperation**, **respect**, **helpfulness** and **kindness**.

Authentic real-life learning

The third organisational element was application of authentic real-life learning. All garden tasks in this study involved an element of life application with real-life consequences. If a recipe was followed correctly, everyone enjoyed their food. If correct change was given with vegetable orders, the customers were happy. If instructions were followed accurately, the chickens enjoyed safe wellness. If weeding and mulching were done regularly, the plants flourished. If a portion of the profits were given to charity, someone enjoyed a better life. The

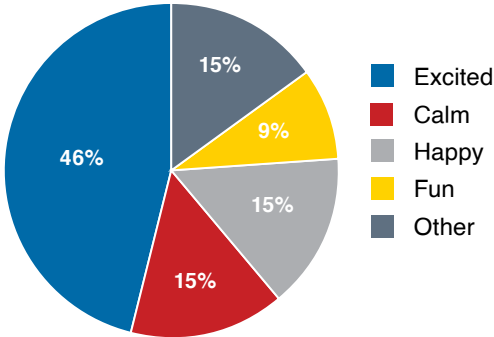


Figure 1. Feelings self-identified by children when participating in the garden program.

application of garden activities to real life contexts was explicitly linked to the values of **honesty**, **excellence**, **perseverance/diligence** and **generosity/stewardship**.

In line with Clement's (2010) reasoning that values actualisation impacts the school culture and ethos, the Grades 3-4 and Grades 5-6 groups were also asked, "*How do you feel when you work in the garden?*". Figure 1 provides an analysis of the answers given. Four of these answers were preceded by the adverb "*really*", which added more emphasis. The words in the 15% of other responses included '*enthusiastic*', '*super*', '*great*', '*incredible*' and '*delightful*'. There were no negative responses and only one neutral response.

Overall, the children were very positive about the school garden program, indicating that the garden was a happy place. The children's responses support the plausibility that the garden environment, inclusive of the learning activities, was conducive to a positive school culture and therefore to the actualisation of values.

Discussion and conclusion

A critical component of character development identified in values literature is the opportunity to practise values (Lovat et al., 2009; Marks et al, 2015; Reye, 2009). While conversations and value-filled narratives help establish values literacy, enacting values in practical ways leads to values actualisation (Clement, 2010). This school garden program provided an opportunity for children to enact positive values and, of importance, was the children's ability to articulate these values. The values they self-identified (care, patience, cooperation, kindness, helpfulness and understanding) appeared to occur naturally in response to the garden context, rather than in response to expected behaviours conveyed by a set of rules. The children made direct links between these values and the garden program, clearly indicating their belief that the garden program was helping to grow their characters.

Two broad types of values were identified in this study: intrapersonal and interpersonal. Intrapersonal values play a role in character development and were linked most strongly to the garden's organisational element of real-life learning. The real-life nature of the tasks gave the students opportunities to enact intrapersonal values as they worked in the market shop, cooked from recipes, harvested vegetables and tended the garden beds. The understanding that their behaviour impacted the success of the garden program encouraged the children to be responsible, generous, honest and to strive for excellence in these authentic tasks.

This study also demonstrated how the school garden program offered ample opportunity for children to work alongside others in a positive environment where goals were met through working as a team, and therefore allowed opportunities for interpersonal values to be enacted. This supports the school garden literature that offers evidence of student growth in the areas of social interaction (e.g. Austin, 2021; Blair, 2009; Dyg & Wistoft, 2018; Passy, 2014). Linked strongly to interpersonal values were the two organising elements of heterogeneity and collaboration. The heterogeneous composition of the groups, consisting of mixed genders and ages, encouraged a culture of understanding, helpfulness and kindness as a diversity of students worked together. It became evident from the comments that the students perceived this to be a positive opportunity to become better people, with both the younger and the older students benefitting from the developing culture of understanding. This finding aligns well with Clément's (2010) comments about values actualisation and the impact on school culture and ethos. Regarding collaboration, the range and nature of the garden program activities provided a context in which the success of the activities depended upon cooperation. This collaborative environment created a context for cooperation and other interpersonal values including respect, care, kindness and understanding, and confirms the important role of the 'hand' component in values education, as identified by Lovat et al. (2009). This school garden program therefore provided opportunities for children to enact values as a precursor to the actualisation of values. The school garden program also had a positive culture, indicated by the self-identified feelings of students (Figure 1) and the values evident when engaged in the garden program (Tables 1 & 2).

Although Clement (2010) proposes that the actualisation of values in a school program impacts the culture of the school, he also acknowledges the reverse position. This reciprocal relationship was observed in the present study.

Limitations

Despite the interesting results, we acknowledge that this investigation has limitations. First, it is a small case study and would benefit from a study spread across a wider range of schools and a greater number of participants. Second, it is important to acknowledge that the garden program was not the only area of the school's operation contributing to character development and the actualisation of values. Finally, the role of

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the teachers in promoting values was not known. However, the students at this school were clear in attributing aspects of their character growth through values actualisation to the school garden program. This study therefore demonstrates that a school garden program, operated in the way described, offers fertile ground for values actualisation and character development. **TEACH**

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“the students at this school were clear in attributing aspects of their character growth through values actualisation to the school garden program.”