

# Final Report

For the Evaluation of the Clarendon Vale  
Primary School Expanded 24 Carrot Gardens  
Program, 2021-2024

December 2024



UNIVERSITY of  
TASMANIA

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(Photo provided by Yasmin Mund, 2024)

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The research design and ethical permissions for this evaluation received approval from the University of Tasmania Human Research Ethics Committee (ID: HO026677), and the Tasmanian Department for Education, Children and Young People (Education and Performance Review Committee (ID: 2022- 10).



# Executive Summary

## What is the expanded Kitchen/Garden Program (E24CG)?

The 24 Carrot Gardens Program has operated at Clarendon Vale Primary School (CVPS) since 2016. In 2021 Material Institute's 24 Carrot Gardens Program was expanded to include all students from kindergarten to Year 6 and additional opportunities for students, parents and carers to work with kitchen and garden specialists in learning about growing, harvesting, food preparation and cooking. The expanded program also provides individual alternative learning sessions for students identified as requiring specialised one to one learning opportunities. The E24CG initiatives undertaken at CVPS between 2021-2024 are the context and timeline for this evaluation.

## What difference has the E24CG made, and how?

All points in this section are made in the context that COVID 19 and community factors negatively affected the students and other community members in 2022 and were still impacting into 2023. This made it difficult for the impact of the E24CG to be separated out in quantitative measures such as attendance and survey results. However, interview and observation data were able to explain where and how the E24CG was making a difference.

The E24CG has **positively affected inclusion and engagement by the school community**, that is students, families, staff and other stakeholders. It has:

- been associated with higher student attendance on kitchen and garden program activity days of the week
- fostered inclusion and engagement by providing opportunities for students, families, community and school staff to come together and participate in E24CG activities and spaces
- while family and community participation has been limited to date, 2024 has seen the school offer events (i.e Harmony Week, Winter Feast) that have seen family and community engage in activities drawing on the E24CG. Participation in these events has been significant, and feedback is positive

- built a sense of belonging, ownership and agency among students by offering a variety of activities that allow and encourage all students to share their creations and achievements with peers and families
- facilitated students' sense of inclusion and wellbeing by funding specialist kitchen and garden staff positions. Some of the adults in these positions have held their positions at CVPS over several years, providing familiarity and continuity. This has helped balance the impact of high levels of schoolteacher/leadership turnover on student wellbeing in relation to their emotional engagement, sense of security and connection making with adults.

The E24CG has positively affected engagement in learning and academic outcomes of students. It has:

- increased students' demonstrated motivation to learn by providing a range of physical spaces in which a diversity of learning activities occur.
- improved academic outcomes by funding specialist staff positions which provide one on one learning opportunities for less engaged students, as well as collectively assisting all students to maximise learning outcomes, including building literacy and numeracy.
- created a context for teachers to provide authentic Australian Curriculum-related learning activities that engage a wide diversity of the CVPS student cohort

**Note:** There is scope to better support teachers to make links between the E24CG and the Australian Curriculum. Creating and sharing teaching and learning resources contextualised for CVPS and providing professional development for maximising use of these will help enable this.

The E24CG has **positively affected development of practical food growing and cooking skills and awareness of healthy eating choices.** It has:

- provided opportunities for students to learn to cook healthy food
- provided opportunities for students to learn to grow healthy food
- provided opportunities for students to try healthy food through kitchen activities and provision of free breakfasts and lunches
- increased families' awareness of healthy food choices through students taking food and recipes home, school events that feature students' participation in preparation and serving of food to their families, and to a limited extent, availability of produce to take home.

There is **very limited evidence that the E24CG has impacted student career aspirations or education pathways for grade 7 students**

contributing voice to this evaluation, however, this could be mitigated by:

- providing opportunity for equivalent (to grade 6 E24CG at CVPS) kitchen garden program engagement opportunities for grade 7 students at Bayview Secondary College (BSC); noting that BSC is also a participant in the 24 Carrot Gardens program.
- contextualising the Tasmanian Agricultural Education Framework (DECYP, n.d), to develop a similar approach coordinated across schools in the health, wellbeing and hospitality curriculum and sectors could go some way toward facilitating enhanced understanding of careers, and education and training pathways.

**Note:** The grade 7 student voice findings should be looked at explicitly within that context and not be extended to make assertions for older grades.

(Photo provided by Yasmin Mund, 2024)



## Does the E24CG help deliver on the ambitions of Tasmania’s Education, Health and Wellbeing strategies?

Yes, **the evaluation finds evidence of** alignment between the process, outcomes and impacts of the E24CG, and that this is working to help fulfil goals of **whole-of-government Child and Youth Wellbeing Strategies** (It Takes a Tasmanian Village Tasmanian Government, 2021; Wellbeing for Learning Child and Student Wellbeing Strategy, Department of Education, Children and Young People, 2022).

Specifically, we find **compelling evidence** of the E24CG supporting participants:

- having material basics; and
- learning.

Further, we find **emerging evidence** of alignment for:

- feeling safe, loved and valued
- being healthy
- having a positive sense of culture and identity, and
- participating.

## Recommendations

**We identify several ways that the demonstrated strengths of the E24CG at CVPS could be consolidated and extended.** Recommendations are for schools, Department of Education Children and Young People and other government departments, funders and collaborations.

### 1. Recommendations for Clarendon Vale Primary School and other schools

- 1.1 We **recommend sustained, further investment in the roles of kitchen and garden specialists, project manager and lead teacher at CVPS.** These roles are key for enablers for the ability of everyone involved in the E24CG to contribute to delivering on its overarching vision.
- 1.2 While the school itself has a limited budget, **there is value in prioritising a designated lead teacher for E24CG,** with hours allocated to the function. This position would be responsible for reinforcing curriculum connection possibilities of the E24CG, sharing of resources to support it within the school and with other schools with kitchen garden programs.

- 1.3 The school should **ensure that professional learning and teaching resources for the E24CG are available** to incoming members of staff.
- 1.4 The school should **continue to use the E24CG to create opportunities for families to be involved at all levels,** from coming along to food centred events, to volunteering in E24CG activities and the school more generally. It takes time, communication and continuity to build trust.

### 2. Recommendations for Department of Education, Children and Young People and Government

- 2.1 Professional development with **system wide sharing of learnings and resources about school kitchens and gardens** should be established and maintained.
- 2.2 **The Tasmanian Agriculture Education Framework** developed in partnership with the Department of Natural Resources and Environment Tasmania, and associated Tasmanian Agricultural Education Network (TAEN) structure **should be extended and adapted to include and support school kitchen gardens.**
- 2.3 **TAEN’s** work (and subsequent resources developed) with school farms in Tasmania provide **exemplars of teaching, learning and professional development resources that could be contextualised for the E24CG at CVPS. Stephanie Alexander curriculum resources should also inform the contextualisation** of E24CG and/or broader KGP resources developed.
- 2.4 **School-community relationships must be nurtured and considered** in the inevitable changes in leadership of organisations, particularly of schools. Templates such as those developed by TAEN for school farms should be developed **to assist schools and communities to manage changes.** These initiatives would benefit from building and leveraging a wider networked system of teaching and learning resource creation/contextualisation with teacher professional organisations in Tasmania. Such networking is likely to enable mutually beneficial collaboration and resource sharing opportunities.

- 2.5 Schools need to be **resourced to effectively participate in and benefit from philanthropic partnerships** such as the E24CG. This evaluation suggests wider view of the costs and benefits of interventions in childhood to improve health literacy and facilitate learning for the diversity of students in government schools and the net cost to governments would be beneficial.
- 2.6 **Cross-government partnerships** between the education and health/hospitality sectors, modelled on examples such as the Tasmanian Agricultural Education Framework, should be explored, with the Department of Health and the Department of State Growth's Creative Industries, Sport and Visitor Economy Division as potential partners.
- 2.7 **Encouraging school-community organisation** partnerships for kitchen gardens is essential. The sharing of the garden between CVPS, Child and Family Centre and Neighbourhood House at CVPS is an excellent example of how a garden eases transitions into school, encourages relationships within the community, and enables healthy eating and outdoor activity. Encouraging partnerships with organisations such as Men's Sheds and community impact projects has student, teacher, school and community wide benefits.
- 2.8 **Encouraging ongoing philanthropic and service organisation partnerships** for school kitchen gardens would provide more resources for schools and foster community understanding of how schools can simultaneously improve academic and health literacy outcomes.
- 2.9 The E24CG program demonstrably supports implementation of DECYP's health and well-being strategies. We therefore recommend **DECYP's continued support for the delivery of the E24CG program.**
- 3.2 E24CG should **facilitate connections and communication between schools for sharing of resources** with equivalent positions in 24CG and other school kitchen garden programs.
- 3.3 Using the example of the E24CG at CVPS, **recruitment of further and ongoing funding partners will support the sustainability, and continued development and success of the 24CG offering.** Expanding the network of funding contributions will help **mitigate dependency upon any one funder and distribute pressures** that can be felt by a singular or smaller network of funder/s. This will also help **diversify means for developing and mobilising contingencies that arise from funding and staff changes.**
- 3.5 **Collaboration with an expanded network of partners who can contribute in different ways (i.e funding and/or in kind contributions) to the design, development and realisation of 24CG initiatives,** particularly those that result in upgrades of infrastructure and programs such as the Alternative Learning Program model and specialist staffing inherent to the success of CVPS' E24KG.

### 3. Recommendations for 24 Carrot Gardens program

- 3.1 A **lead teacher position** should be identified at each school, who is **responsible for modelling and leading curriculum connection and enactment possibilities.** While the evaluation has not comparatively examined the utility of the E24CG lead teacher position in relation to lead teacher positions in broader 24CG models/contexts, we posit the demonstrable importance of this position as relevant **for all E24CG iterations of the 24 Carrot Gardens (24CG) model.**

### 4. Recommendations for funders

- 4.1 **Funding partnerships are essential for the success and sustainability of school kitchen garden programs.** While CVPS derives huge benefit from Material Institute's investment in infrastructure, funding for the **ongoing cost of staffing specialists and project manager positions is critical for sustainability and future benefits.**
- 4.2 **In kind contributions** in the form of volunteers' time, skills and resources, such as food donations for breakfasts and lunches are further ways partners can support the success and sustainability of the E24CG at CVPS, or similar programs at different schools.
- 4.3 Suggestions for **securing and collaborating with further partners** include service clubs and the staff-community programs of some larger employers.
- 4.4 **To understand the long-term impact of the E24CG program, a future evaluation is needed** to ascertain how students' engagement and participation in the E24CG program at CVPS relates to their experiences in similar programs at the secondary level, such as the KGP at Bayview Secondary College. A future evaluation of this nature will generate the evidence needed **to understand how and the extent to which these programs impact students' career aspirations in grades 9-12.**

## 5. Collective recommendations relating to all stakeholders (i.e. school, government, program and funder partners)

- **5.1 Readiness to be flexible and accommodate contextual factors for partnerships is essential for success**, particularly in school settings. As well as their physical infrastructure, schools vary in the assets of the place they are located, including businesses, industries and strengths and characteristics of the people in the community.
- 5.2 Work in ways that **carefully consider and accommodate the needs, concerns, and strengths of the communities where programs like E24CG operate**. The success of programs like E24CG hinge on all stakeholders understanding and working in ways that support the communities they serve.
- **5.2 The commitment of all participating stakeholders to communicate and be responsive in their approach is needed.** Stakeholders should collectively articulate this commitment and be clear upon their individual, collective and collaborative expectations and responsibilities for upholding it at all times.

## Concluding statement

This evaluation has unearthed compelling evidence for how E24CG spaces and programs cater for the diversity of student learning needs. We conclude this attribute of the E24CG contributes to improved academic, social, emotional and health outcomes for students. Further, the fact that student attendance is higher on kitchen and garden activity days indicates that opportunities to participate in the E24CG is a motivating factor for students' coming to school.

We conclude that the diversity of spaces (that is, kitchen, garden and Wingani sensory garden) create opportunities for positive relationships to be established and maintained. Evidence indicates that these spaces and the activities undertaken within them create important contexts for students to engage and behave in ways that point to them feeling secure and valued.

The healthy food cultures fostered and promoted in the E24CG spaces are having an increasingly positive effect upon school-family and school-community engagement. We find family events at school and meals and recipes taken home help create opportunities for students to share their learning and for families to show their children they value the school and their children's achievements.

The E24CG program provides rich and plentiful means for students to engage in meaningful learning experiences that enable them to imagine and explore future possibilities. We conclude these learning experiences are both authentic and powerful in their ability to help students see how knowledge gained, and skills developed in the E24CG can be used at home.

The E24CG has increased access to material basics (i.e nutritious food, outdoor/green spaces) for students and their families. Evidence points to positive shifts toward healthy food choices and preferences at school. We find students enjoy opportunities to be physically engaged and active in the E24CG spaces, and they are taking up opportunities to connect to nature and incorporate environmental values into their culture and identity.

In closing, we find school staff are key to how the E24CG spaces are used. They play an essential role in how the demonstrated strengths and successes of the program are realised. Investment in kitchen and garden specialist positions, and affordances of time and resources for lead and classroom teachers to be supported in their work underpin the success or otherwise of the E24CG going forward.



# Background Information

Here, we describe the context, circumstances and timelines for the evaluation of E24CG initiatives undertaken at CVPS between 2021-2024.

## Clarendon Vale Primary School (CVPS)

Clarendon Vale Primary School (CVPS) is located in Clarendon Vale, Tasmania, Australia. The school was established in 1978 and provides state funded education for students in Years K to 6 from the surrounding community. Like all Tasmanian Government schools, CVPS is committed to the goal that every student has the opportunity to learn and achieve his or her potential.

The school is guided by the *Learner at the Centre* (DECYP, n.d) framework and embraces the government's priority areas including Literacy and Numeracy - improving the basic literacy and numeracy skills of all school-aged children. CVPS is committed to working with its community and supporting teachers working together designing personalised learning opportunities for all students.

The Clarence Plains Child and Family Learning Centre assists transition into kindergarten at CVPS. Students leaving Grade 6 at CVPS are expected to transition into Bayview Secondary College. The Child and Family Learning Centre backs onto and shares the CVPS garden. Bayview Secondary College is a 24 Carrot Gardens school. It also offers agriculture and horticulture subject options to senior grades and is establishing a hospitality subject option through a new school cafe initiative.

During the course of the evaluation, CVPS experienced significant teacher attrition, particularly at the end of the 2023 school year, where only two classroom teachers from that year remained for 2024. While teacher attrition at CVPS has been significant, it is important to understand this within a wider context of national teacher workforce attrition in Australia (Brandenburg et al., 2024; Heffernan et al., 2022).

Specific to CVPS, there were also changes to school leadership, at the Assistant Principal level (end of 2022 school year), and then Assistant Principal and Principal at the end of the 2023 school year. In 2022, the E24CG Lead Teacher left during the year, and this role was not officially replaced. While this is consistent with national teacher workforce trends to not replace skilled roles, the impacts this has for teaching and learning are significant (Stacey et al., 2024). At CVPS, some aspects of the duties and responsibilities of the Lead Teacher role were taken up by the E24CG Project Manager, KG specialists and classroom teachers. These take ups were affected in an ad hoc way and not officially resourced with official workload (hours).

This evaluation is being conducted in and with support of a community that is recognised as having below state and national standard levels of functional literacy and numeracy. This context is consistent with insights accrued over the past five years from the National Assessment Program: Literacy and Numeracy (NAPLAN), in conjunction with data from the Australian Bureau of Statistics (ABS).

These data point to a high proportion of Tasmanian students being below national minimum standards for reading is high in families where parents are unemployed and on low incomes, as well as in households with unreliable and in some cases no access to internet (Doyle et al., 2017). These circumstances are present in the broader Clarendon Vale community in which our case study school sits. Clarendon Vale Primary School's ICSEA score places it in the lowest 3% of schools in Australia. During the period of this evaluation the number of students fluctuated around 120, teaching staff were around 14.3 FTE and non-teaching staff around 14.4 FTE.

These permeating challenges are further compounded by traumatic events that have occurred in the school and wider Clarendon Vale community. Notably, two significant traumatic events impacted on the school and broader community in 2023. Further traumatic events unfolded in the wider Clarendon Vale community, with the death of a parent and associated civil unrest in May and June 2024.

It is important to consider the findings of this evaluation in context of the acute impacts of these events, the disruptions they present for the E24CG, the school, and wider CVPS community.

## CVPS Expanded Kitchen Garden Program (E24CG)

The 24 Carrot Gardens Program has operated at CVPS since 2016. In 2021 Material Institute's 24 Carrot Gardens Program was expanded to include additional opportunities for students, parents and carers to work with kitchen and garden specialists in learning about growing, harvesting, food preparation and cooking. The expanded program also provides alternative learning opportunities for students identified as requiring specialised learning opportunities. The expanded program was funded by substantial private philanthropic funding from a Hobart-based family foundation. The E24CG initiatives undertaken at CVPS between 2021-2024 are the context and timeline for this evaluation.

### Catalyst for 24 Carrot Gardens program expansion

The catalyst for the E24CG was a desire from a local charity foundation to explore the best possible way the program could serve the CVPS community. The foundation had supported the 24 Carrot Gardens program at CVPS for several years, and approached the team to explore how a broader, deeper, and more contextualised program could positively impact the school community.

This discussion resulted in the following goals:

1. Improve Attendance and Educational Outcomes: Boost attendance rates and overall learning results.
2. Promote Healthy Eating: Increase awareness of healthy eating and encourage observable healthy choices.
3. Engage Families: Involve parents and caregivers in the program to extend its benefits beyond the classroom and school setting.

To achieve these goals, the 24 Carrot Gardens program was expanded in the following ways:

- School Meals: Introduced school breakfast and lunch programs (Goals 1 and 2).
- Increased Accessibility: Extended the program to include students from kindergarten (instead of starting in Year 3) and a kitchen garden alternative learning program to support children needing extra help with classroom learning (Goal 1).
- Curriculum Alignment: More actively integrated KGP activities into the school curriculum (Goal 1).
- Parental Involvement: Engaged parents and caregivers through recipes, activities, and events related to the KGP (Goal 3).

These three goals formed the basis of the evaluation of the expanded program which received three years of funding, to assess its impact.

Building on earlier healthy school food and eating programs such as Love in a Lunchbox (DECYP, 2019) lunches are provided to students has also increased to five days a week over the course of the evaluation. From Term 1, 2021 to Term 4 2024, the CVPS E24CG has received additional support from Material Institute. This has funded an increase in Kitchen and Garden staffing hours, including a project manager role, initially a day a week in terms 1 and 2, 2021 to develop the program, then 11 hours per week. The expansion also provided staffing for individual sessions for Alternative Learning Group students, which is not a feature of the standard 24 Carrot Gardens program.

The CVPS E24CG is guided by the following two aims; these being:

- improve healthy food access; and
- identify and articulate education opportunities and outcomes.

To realise these aims, the CVPS E24CG sought to action the following initiatives between 2021-2024:

1. Actively engage students, staff, and community in the kitchen/garden program on a weekly basis, with produce grown in the garden being harvested and used in the kitchen.
2. Expand the program to offer weekly classes for Kindergarten-Grade 2 students.
3. Improve current physical infrastructure to support expansion of KPG and food production.
4. Expand the Alternative Learning Program (ALP).
5. Establish links with local high school (Bayview Secondary College) to further learning pathways for in horticulture, agriculture and hospitality.
6. Integration of the canteen, Kitchen Garden program and lunch programs.
7. Provide affordable meals every day using produce from garden and community partners.
8. Upskill students with gardening and cooking skills, improving self-esteem and emotional regulation.
9. Upskill parents with gardening and cooking skills.
10. Further integrate opportunities to develop numeracy and literacy skills into the program.
11. Improve school outcomes, including retention, academic progress, and behavioural management.
12. Develop partnerships with community stakeholders.

In addition, Grade 6 student cooking and environmental leaders have supported the program since 2021, with between three and six cooking leaders and between six and eleven environmental leaders each year. These students assist in tasks such as serving food, taking fruit and toast to classes, harvesting food for the kitchen and facilitating school-wide sustainability programs.

## CVPS Alternative Learning Program

The CVPS Alternative Learning Program (ALP) caters for students who struggle to learn in mainstream classes. The ALP has been in place since Term 1 2021 and student numbers have been between 10 and 14 students per year. Additional hours were made available for kitchen and garden specialists to contribute to the ALP. Where possible, 30 minute sessions were allocated for individual students. Over the course of the evaluation there has been a concurrent review and adaptation of activities to improve the ALP's structure so as to meet its goals.

In 2023, the former sensory garden was reimagined and refreshed by groups of students engaged in the ALP. These students worked with E24CG staff to develop the space into what is now known as the Wingani Sensory Garden. Students participating in the ALPs have continued engage in ALP activities in Wingani Sensory Garden.

## Material Institute's 24 Carrot Gardens

24 Carrot Gardens is a food education program of Material Institute, a registered charity in Lutruwita/Tasmania.

The program partners with schools in low socio-economic communities to establish kitchen gardens where students learn to grow, harvest, cook and share seasonal food. This seed to plate approach builds practical skills while fostering curiosity, creativity and connection with food and one another (Material Institute, n.d).

24 Carrot Gardens builds upon Stephanie Alexander's kitchen garden model, drawing on their curriculum-linked resources, whilst providing a unique model of ongoing program support to bolster successful and sustainable programs that are tailored to the community context (Material Institute, n.d). The 24 Carrot Gardens team provides wrap-around support with the development and maintenance of garden and kitchen infrastructure, horticultural and culinary expertise, professional development for educators, and opportunities for engaging students in workshops and events.

Founded in 2014, 24 Carrot Gardens started in primary schools in the south of Lutruwita/Tasmania, and in recent years has expanded into secondary schools and north/northwest regions. Since its establishment, 24 Carrot Gardens has balanced a complex relationship between the artful 'gold standard' (Badham et al., 2021) and an integrated teaching and place-based learning approach that stems from the arts and sciences. Designed in response to the local environmental, cultural and socio-economic context, 24 Carrot Gardens has contributed to a growing sense of community engagement, interdisciplinary learning, and a strong network of donor investment across the island.

## Stephanie Alexander Kitchen Gardens

Around the world, place based programs akin to that being explored in this evaluation continue to increase in popularity (Wolsey & Lapp 2014). This trend is evident in Australia, where school garden numbers have been steadily increasing since the Stephanie Alexander Kitchen Garden (SAKG) pilot program in 2001 (Block et al., 2012). In 2021 there were over 1630 school-based garden (SBG) programs operating around Australia (SAKGF website 2021). In Lutruwita/Tasmania, where this single school case study is being conducted, Material Institute's 24 Carrot Gardens project is being carried out in twenty-four schools, nine of which were launched in 2022.

## School Food Matters

School Food Matters, previously named the Tasmanian School Canteen Association, is a not for profit, non-government organisation that is funded and supported by Tasmania's DECYP, Department of Health and Department of Premier and Cabinet. The initiative works to support school communities to promote and provide nutritious, affordable, safe, and locally prepared food services within schools. This support is provided to schools through assistance with the development of efficient food services and their management and operations; resources and information on food safety, food selection and menu planning; delivery of professional learning for school communities; and assistance in developing and achieving the Smart Food Award and School Food Plan (School Food Matters, n.d).

School Food Matters commenced at CVPS in 2022. They provided ingredients for three days a week, Material Institute provided funding for staffing. When lunches were increased to five days a week, School Food Matters continued with same funding arrangement and Material Institute provided funding for additional staffing and ingredients. From term 4 2024, School Food Matters funds staffing to help prepare lunches. School Food Matters has accredited CVPS at its top level of Platinum which means at least 80% of ingredients used at the school are classified at the highest level the according to the Australian Guide to Healthy Eating (School Food Matters, n.d).

## Loaves and Fishes

Loaves and Fishes is a faith-based organisation that repurposes surplus food from landfill to provide meals to schools and other community partners. Loaves and Fishes partners with School Food Matters, the Tasmanian State Government, and schools to source and distribute ingredients to for healthy, nutritious meals to students in thirty schools statewide (Loaves and Fishes, n.d). As well, staff from Loaves and Fishes' food relief kitchen have attended two of CVPS community events to assist students with cooking.

This evaluation focuses explicitly on scrutinising how the E24CG helps deliver on the ambitions of Tasmania's Education, Health and Wellbeing strategies, as well as how the E24CG is delivering on its mission. While the evaluation did not explicitly look at the relationships between different concurrent programs, we observe a number of complementary approaches exist between the collective programs noted here (i.e the E24CG, 24 Carrot Gardens, School Food Matters, Loaves and Fishes). While attending to the ways in which these programs work in relation to each other us out of scope of this evaluation, we note evidence of the ways these programs complement each other's deliver, particularly in respect to the provision of meals, and contributing to a range of important personal assets and imperatives for building these (i.e life skills, community connection, education, health literacy).

## Tasmanian Government Department realignment

In 2022, Tasmanian Government Departments relating to children, education and young people were brought into closer alignment via a department integration (Department of Premier and Cabinet, 2022). This integration saw the then Department of Education (DoE) rebranded into the Department for Education, Children and Young People (DECYP).

## Aims of the evaluation

The specific aims for the research conducted within the evaluation are as follows:

**Aim 1)** To evaluate the process, outcomes and impacts of the project in relation to alignment with goals of the whole-of-government Child and Youth Wellbeing Strategy – It Takes a Tasmanian Village (Tasmanian Government, 2021) and the Department of Education, Children and Young People (2022) Wellbeing for Learning Child and Student Wellbeing Strategy.

**Aim 2)** To determine the extent to which the planned expansion of the CVPS 24 Carrot Gardens 2021 - 2024 contributes to achieving the overall vision of:

- a. improving healthy food access
- b. improving learning outcomes
- c. supporting greater community engagement in the program
- d. developing links with high schools and career pathways

## Child and Youth Wellbeing Strategies central and related to the evaluation

This evaluation points to several ways in which outcomes of participating in the CVPS E24CG align with the aims of health and wellbeing imperatives described in It takes a Tasmanian Village (DECYP, 2021) and the Wellbeing for Learning (DECYP, 2022) strategic documents. Both key strategies share a common architecture with the six Australian Research Alliance for Children and Youth (ARACY, 2022) wellbeing domains and subdomains.

While the research questions of this evaluation do not explicitly examine other government strategies, where evidence enables us to do so, we point to alignments with related strategic policy documents, Food Relief to Food Resilience, Tasmanian Food Security Strategy 2021 – 2024 (Department of Premier and Cabinet, 2021), and the Aboriginal Education Services [AES] Action Plan 2024-2025 (Department for Education, Children and Young People, n.d).

Alignments to these two strategies are only made within the scope of the evaluation research design, research questions and approved ethical permissions. Recommendations point to where the findings of this evaluation could inform the focus and scope of future evaluations about these two strategies. We also point to the Tasmanian Agricultural Education Framework (Department for Education, Children and Young People, n.d) which could help inform the E23CG and other school kitchen garden programs.

An integrated overview of where E24CG initiatives and outcomes align with the aims of the two key strategic documents, and where potential connections with the two other strategic documents can be made are provided below.

### Being loved, safe and valued

Learners have positive relationships and connections with others, feel safe and are respected in their learning environments It takes a Tasmanian Village (DECYP, 2021) and the Wellbeing for Learning (DECYP, 2022). Specifically, the E24CG provides means for participants to:

- Feel safe about their future, their environment, and the climate
- Build relationships that help them feel valued and respected by teachers and other adults in their lives

Potential connection to enablement of connection and capacity building Food Relief to Food Resilience, Tasmanian Food Security Strategy 2021 – 2024 (DPAC, 2021).

### Having material basics

Learners have materials to access and fully participate in education, and the resources to function well and actively engage (It takes a Tasmanian Village, DECYP, 2021; Wellbeing for Learning, DECYP, 2022). Specifically, the E24CG provides means for participants to:

- have access to nutritious food
- have access to outdoors and green space

Potential connection to enablement of food literacy and nutrition Food Relief to Food Resilience, Tasmanian Food Security Strategy 2021 – 2024 (DPAC, 2021).

### Being healthy

Learners have their physical, developmental, psychosocial and mental health needs met, with resources provided to support their growth (It takes a Tasmanian Village, DECYP, 2021; Wellbeing for Learning, DECYP, 2022). Specifically, the E24CG provides means for participants to:

- build health literacy
- foster mental and physical health
- regulate their emotions and be happy

Enablement of connection and capacity building Food Relief to Food Resilience, Tasmanian Food Security Strategy 2021 – 2024 (DPAC, 2021).

## Learning

Learners are supported to be resilient, creative and curious thinkers to engage in lifelong learning (It takes a Tasmanian Village, DECYP, 2021; Wellbeing for Learning, DECYP, 2022). Specifically, the E24CG provides means for participants to:

- feel supported to learn by their caregivers and education providers
- have their individual learning needs addressed to allow them to realise their learning potential
- develop communicative literacy and numeracy skills appropriate to their age
- learn about their world via connections with nature and the outdoors.

Potential connection to enablement of connection and capacity building; food literacy and nutrition *Food Relief to Food Resilience, Tasmanian Food Security Strategy 2021 – 2024* (DPAC, 2021) and *Aboriginal Education Services [AES] Action Plan 2024-2025* (DECYP, n.d).

## Participating

Learners are empowered to share their views, to influence their learning and engage in their learning environment (It takes a Tasmanian Village, DECYP, 2021; Wellbeing for Learning, DECYP, 2022). Specifically, the E24CG provides means for participants to behave and act in ways that demonstrate:

- engagement with others and community groups
- active participation in their own life
- having their opinion heard and valued.

Potential connection to enablement of community engagement and co-design; connection and capacity building; food literacy *Food Relief to Food Resilience, Tasmanian Food Security Strategy 2021 – 2024* (DPAC, 2021).

## Having a positive sense of culture and identity

Learners have a positive sense of identity and belonging and are optimistic about their future and success in learning (It takes a Tasmanian Village, DECYP, 2021; Wellbeing for Learning, DECYP, 2022). Specifically, the E24CG provides means for participants to behave and act in ways that demonstrate:

- a positive sense of self-identity and self-esteem
- having a sense of responsibility, resilience and respect
- being supported to identify their core values about the environment as part of their culture and identity.

Potential connection to enablement of connection and capacity building *Food Relief to Food Resilience, Tasmanian Food Security Strategy 2021 – 2024* (DPAC, 2021) and *Aboriginal Education Services [AES] Action Plan 2024-2025* (DECYP, n.d).



## Methodology

A co-design approach was applied for the research design of the evaluation, through the adoption of Participatory Action Research (PAR) principles, underpinned by appreciative enquiry. A PAR approach (Baum et al, 2006) is based on reflection, data collection and action that aim to improve the circumstances for the people at the centre of the research, who, in turn, can then be empowered to take action. This approach allows the researchers to adequately capture the voices and experiences of the participants, and to be sensitive to the needs and aims of the school community.

Specifically, the research adopts an experience-based co-design (EBCD) methodology (Daly-Smith et al., 2020). This methodological approach actively accommodates multi-stakeholder input from, in the case of this evaluation, teachers, parents, students and community partners in the design of evaluative activities and associated measures. This methodology was adopted due to its increasing prevalence of successful use with marginalised populations, or low SES communities, such as those residing in the target study area, as it enables researchers to work in partnership with communities in a manner that leads to action for change.

## Research Questions

Three research questions guide the aims of this evaluation, these being:

**RQ 1:** In what ways do the processes, outcomes and impacts of the E24CG affect:

- a) inclusion and engagement by the school community: students, parents and caregivers (hereafter, 'parents'), staff and other stakeholders?
- b) engagement in learning and academic outcomes of the students?
- c) development of practical food growing and cooking skills and awareness of healthy eating choices.
- d) enhancement of career pathways?

RQ 2: Where does the E24CG achieve outcomes that align with the vision and goals of *It Takes a Tasmanian Village* (DECYP, 2021) and the *Wellbeing for Learning Child and Student Wellbeing Strategy* (DECYP, 2022).

RQ 3: How might the evaluation findings be applied to further the fulfilment of these strategies and be applied to similar programs in other school communities?

## Data generation

A combination of qualitative and quantitative tools were employed to generate the data required to identify where and how the E24CG fulfils the aims of this evaluation. The specificities and timeline for data generation are described below:

### Quantitative data

There were three sources of quantitative survey data, annual staff surveys administered by the evaluation team, attendance data collected by CVPS and annual student, staff and parent survey data collected by DECYP.

### Staff surveys 2022 to 2024

Staff surveys consisted of 15 Likert scale questions pertaining to the evaluation aims. The surveys were administered via Qualtrics software in Term 3 each year from 2022 to 2024. Staff were encouraged to complete the survey in staff meetings, with those unable to attend being provided with the link to the survey by the school. The surveys also included an option for staff to provide written comments.

Table 1 shows the number of staff respondents varied from year to year, with fewer non teacher staff (e.g. office staff, teacher aides) completing the survey in 2023 and the vast majority staff completing the survey in 2024. Staff turnover from 2023 to 2024 was high, with only two teachers continuing at the school.

**Table 1 Respondents by year**

		Year 2022	2023	2024
Role in school	Teacher	9	10	10
	Teacher Aide	7	2	9
	Other	2	1	4
	Total	18	13	23
Surveyed previously	Yes	NA	7	6
	No	NA	5	17
	No response	NA	1	0

**School attendance data**

Aggregated attendance data by grade and by term was provided by CVPS for the period 2021 to term 3 2024.

**DECYP survey data 2021 to 2023**

Clarendon Vale Primary School provided aggregated annual Student Wellbeing and Engagement Survey Data for 2021 to 2024, and DECYP provided annual Staff and Family School Satisfaction Survey Data for 2021 to 2023, noting that the surveys are administered at the end of Term 3 each year and 2024 family and staff data was not available at the time this report was prepared. Questions were selected based on the research questions and the domains of the Child and Youth Wellbeing Strategy relevant to the evaluation (Table 2).

Table 2 Survey questions used in evaluation

Question/Item	Student	Family	Staff
<b>Loved, safe and valued</b>			
Safe at school	x		
My child feels safe at this school		x	
School climate	x		
Important adults at school	x		
Connectedness to adults at school	x		
I feel like I am part of my school community		x	x
Family feedback is used to inform decision making about this school		x	
Parents at this school can talk to teachers about their concerns			x
<b>Material basics</b>			
Nutrition - breakfast	x		
This school is well maintained			x
<b>Healthy</b>			
Satisfaction with life	x		
Happiness	x		
Optimism	x		
Emotional regulation	x		
Overall health	x		
My child likes being at this school		x	
<b>Learning</b>			
Emotional engagement with teachers	x		
Perseverance	x		
Cognitive engagement	x		
Academic self-concept	x		
The school offers a good range of subjects and activities			x
My child's learning needs are being met by this school		x	
Staff at this school provide ideas to help me support my child's literacy and numeracy		x	
Staff help parents to support their child's literacy and numeracy			x
All students' learning needs are being met at this school			x
Teachers support student learning to higher levels			x
<b>Participating</b>			
Friendship intimacy	x		
Resilience (coping skills)	x		
Learning practices	x		
This school is preparing students for their future		x	
<b>Having a positive sense of culture and identity</b>			
School belonging	x		
Peer belonging	x		
People from diverse backgrounds are respected at this school			x
I would recommend the school to others			x

The surveys measure three levels (high, medium and low) for items/questions for each year. These are levels of wellbeing in the case of the student survey and of satisfaction in the case of the staff and family surveys. Some items were missing for some years due to small participant and survey response numbers. No data was available for the family survey in 2022. Small numbers of responses to the family survey align with challenges experienced in generating data over the period of COVID disruption. It should be noted that the number of families responding to the survey was very low, and it is quite possible that families who felt more connected to the school were more likely to respond to the survey.

Results provided were analysed for statistically significant changes over the three year period (four years for the Student Wellbeing survey) using Spearman correlation analysis, considering small sample size and non-linear trends as the most appropriate correlation test. with coefficients  $\leq 0.05$  considered to indicate a significant trend over time. While the Student Wellbeing survey data was provided for each of Years, 4, 5 and 6, because of small numbers in each Year level, and related the lack of statistically significant results by Year level the results reported in this report are for aggregated total student responses for each of the four years 2021 to 2024. Note that in each year and for each item/question only around half to two-thirds of the eligible years 4 to 6 students responded to the Student wellbeing survey.

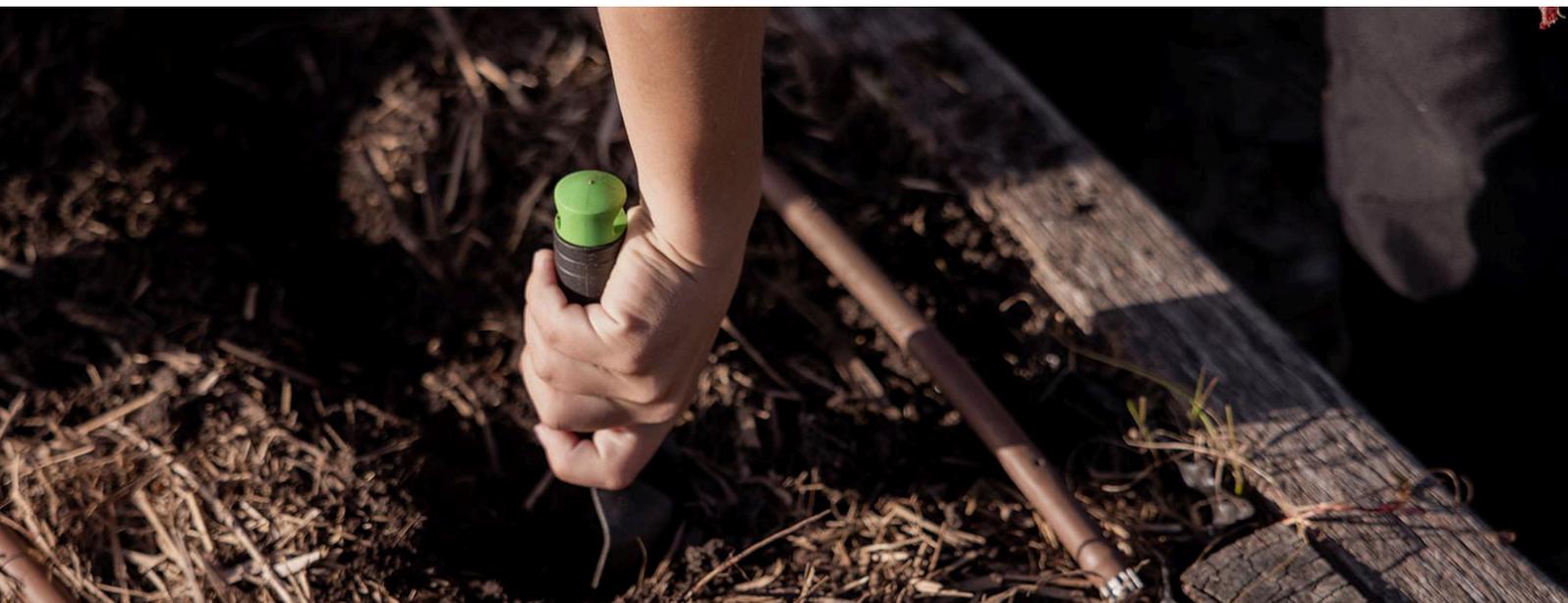
There was no evidence of consistent trends of increases (or decreases) in levels of wellbeing reported by students year on year over the four years of data. Therefore, additional analysis compared proportions of reported wellbeing levels for each year to each of the other three years using chi squared tests. The aim for to uncover any other trends that could point to changes in school or community that may have impacted student wellbeing.

Graphs showing proportions of students reporting each of the three levels of wellbeing in each year appear in the Findings under themes relevant to the Tasmanian strategies against which the E24CG is evaluated. A summary of the Student Wellbeing Survey findings appears in Table 3 early in the Findings section.

## Qualitative data

From August 2021 to September 2024, the evaluation team conducted the following qualitative data generation activities:

- Fourteen semi-structured interviews were conducted from 2022 to 2024 with CVPS staff who were school leaders, classroom teachers and E24CG support staff with lived experience of working in the kitchen and/or garden, with staff supplying photographs of student work intermittently via email throughout 2023.
- Seven semi-structured interviews were conducted from 2023 to 2024 with various community stakeholders with connections with the CVPS E24CG.
- Four semi-structured interviews were conducted in 2024 with parents and grandparents of children that participated in the CVPS E24CG during the evaluation period.
- One semi-focused interview was conducted in 2024 with a Grade 7 Manager of Bayview Secondary College.
- Two focus groups were conducted with nine grade 7 Bayview Secondary College students in 2024, who had recently transitioned from CVPS.
- Three observations sessions were undertaken in 2023 with classes of grades 4-6 students during Kitchen and Garden classes at CVPS.
- One observation session was conducted in 2023 with a cohort of alternative learning program students in the E24CG at CVPS.
- One observation session was conducted at CVPS's Winter Feast event in June 2024.



## Observations

Observation sessions were conducted with groups of students during their E24CG classes at CVPS and at CVPS's Winter Feast event. Observation sessions lasted up to two hours. At each session, CVPS staff introduced the evaluation team member(s) to the observation group (consisting of either students and/or parent/community members). The participant groups were informed that the evaluation team member(s) were there to observe them and to take notes. Notes were taken both electronically and written on paper, depending on the observation session. These notes were organised according to a prepared observation sheet.

With consent, evaluation team member(s) captured nonidentifying photographs of samples of students' work during observation sessions. These samples included images of students participating in E24CG classes, E24CG journals, classroom projects and various students' work that was displayed on walls around CVPS.

## Semi-structured interviews

Semi-structured interviews were held with CVPS staff, community stakeholders, parents/community members and a Grade 7 Manager from Bayview Secondary College. Interviews varied in time from fifteen minutes to up to ninety minutes, and were conducted in mutually convenient spaces, such as private offices on school premises. Several interviews were conducted online via Microsoft Teams. With consent, several interviews with parents/community members were conducted over the phone. Phone interviews were conducted on occasions where participants elected to share their private phone number with an evaluation team member.

Prior to participation in the interview, participants were provided with an information sheet about the project and a consent form. Participants were invited to ask their interviewer questions about the evaluation project and raise any concerns. Written or verbal consent was obtained by the researcher prior to beginning the recorded interview.

The evaluation team developed several interview schedules to help guide the trajectory of the interviews. These schedules were specifically designed for each participant cohort and facilitated a more relaxed and conversational style of interviewing that allowed for in-depth understanding and reciprocity of exchange between the interviewees and the evaluation team. Participants were free to discuss their experiences and elaborate on topics they perceived as important. Similarly, the flexibility of the semi-structured design meant that members of the evaluation team were able to ask additional questions to clarify answers given by interviewees and to follow new lines of questioning as these emerged throughout the interviews.

## Focus groups

Two focus groups were conducted with small groups of grade 7 students at Bayview Secondary College, who had recently transitioned from CVPS. Nine students participated in these focus groups, which were held in a private room at Bayview Secondary College. These focus groups ran for up to forty minutes. Like the semi-structured interviews, focus groups were largely open ended in nature. While a preprepared interview schedule provided a framework for each focus group, the topics of the focus group discussions were largely led by the student participants with some guidance from the interviewer. Thus, allowing for student participants to share stories and raise issues and/or questions that they felt were imperative to the E24CG.

We developed a set of codes to analyse our qualitative dataset. This coding framework and our subsequent emerging themes relate to demonstrations of alignment with *It Takes a Tasmanian Village* (DECYP, 2021) and the *Wellbeing for Learning Child and Student Wellbeing Strategy* (DECYP, 2022). To help us map and track demonstrations of alignment across the qualitative dataset, our codes reflect key aims derived from the domains and subdomains from these documents (see Appendix X, for an outline of our coding framework using these documents). Thematic analysis of our qualitative data set, using NVIVO coding software, are incorporated into the Discussion section of this report.



# Findings

This section commences with an overview of results from the evaluation survey data generated with staff members in 2022, 2023 and 2024, followed by student, staff and family survey data and attendance collected by DEYCP as part of normal school data collections in 2021, 2022 and 2023 and 2024, noting that only Student Wellbeing 2024 survey data was available at the time this report was compiled.

As noted in the methodology, the selection of questions from both the evaluation staff survey and the DECYP surveys are informed by detail from the domains and sub-domains of *It Takes a Tasmanian Village* (DECYP, 2021) and the *Wellbeing for Learning Child and Student Wellbeing Strategy* (DECYP, 2022).

The findings section goes on to explore impacts of the E24CG in context of the integrated overview of the two key strategies, and where relevant, the two other related strategies, pertaining to the evaluation aims. The findings bring insights from the quantitative and qualitative data sets into conversation with pertinent scholarship drawn from literature reviews conducted across the course of the evaluation. By examining the project's outcomes in relation to its stated aims, we are able to identify a range of enablers and inhibitors for its success.

## Staff survey results 2022 to 2024

### Staff perceptions of E24CG impact:

*This program is crucial to our school. It encourages engagement and health for all. The program has provided students with healthy and nutritious lunches, a lot of my students rely on the breakfast program to have food in the morning, given Maslow's hierarchy of needs, this is incredibly important.*

(Anonymous Staff comment, Staff Survey, 2024)

Figure 1 provides the perspective of consenting CVPS staff (teachers, teacher aides, ancillary staff) as to how the project is broadly perceived by this participant group. It compares the perceptions of 18 staff in 2022, 13 in 2023 and 23 in 2024.

Figure 1 provides a compelling picture of how the staff perceived students engaged with the E24CG, with all 2023 and 2024 surveyed staff, and most in 2022 agreeing the E24CG:

- contributed to a safe and harmonious school environment,
- helped students be healthy and active,
- helped with academic outcomes of learning new things and about nature and the environment, and
- encouraged students to eat healthy food.

All surveyed staff also agreed in 2023 and 2024 that:

- the school had appropriate infrastructure for the E24CG, and
- students looked forward to and enjoyed being physically active and participating E24CG activities.

### Changes over time

- Statistical tests<sup>1</sup> show agreement between 2022 and 2024 increased significantly for:
- school infrastructure is well suited to the E24CG (83% in 2022, 100 % in 2024),
- students are motivated to learn (39% in 2022, 91% in 2024),
- E24CG facilitates greater engagement by the parents in school activities (33% in 2022, 65% in 2024),
- E24CG encourages students to eat healthy food (83% in 2022, 100 % in 2024), and
- E24CG helps the students decide what to do after they leave school (22% in 2022, 78% in 2024).

<sup>1</sup> Pearson chi square, significance level  $\leq 0.05$

While differences were not statistically significant, it is worth noting that agreement that the E24CG teaches new skills which are used at home also increased over the three years, from 72% in 2022 to 91% in 2024. Staff comments support the value of the program to students' lives outside of school, and to their post school aspirations, for example:

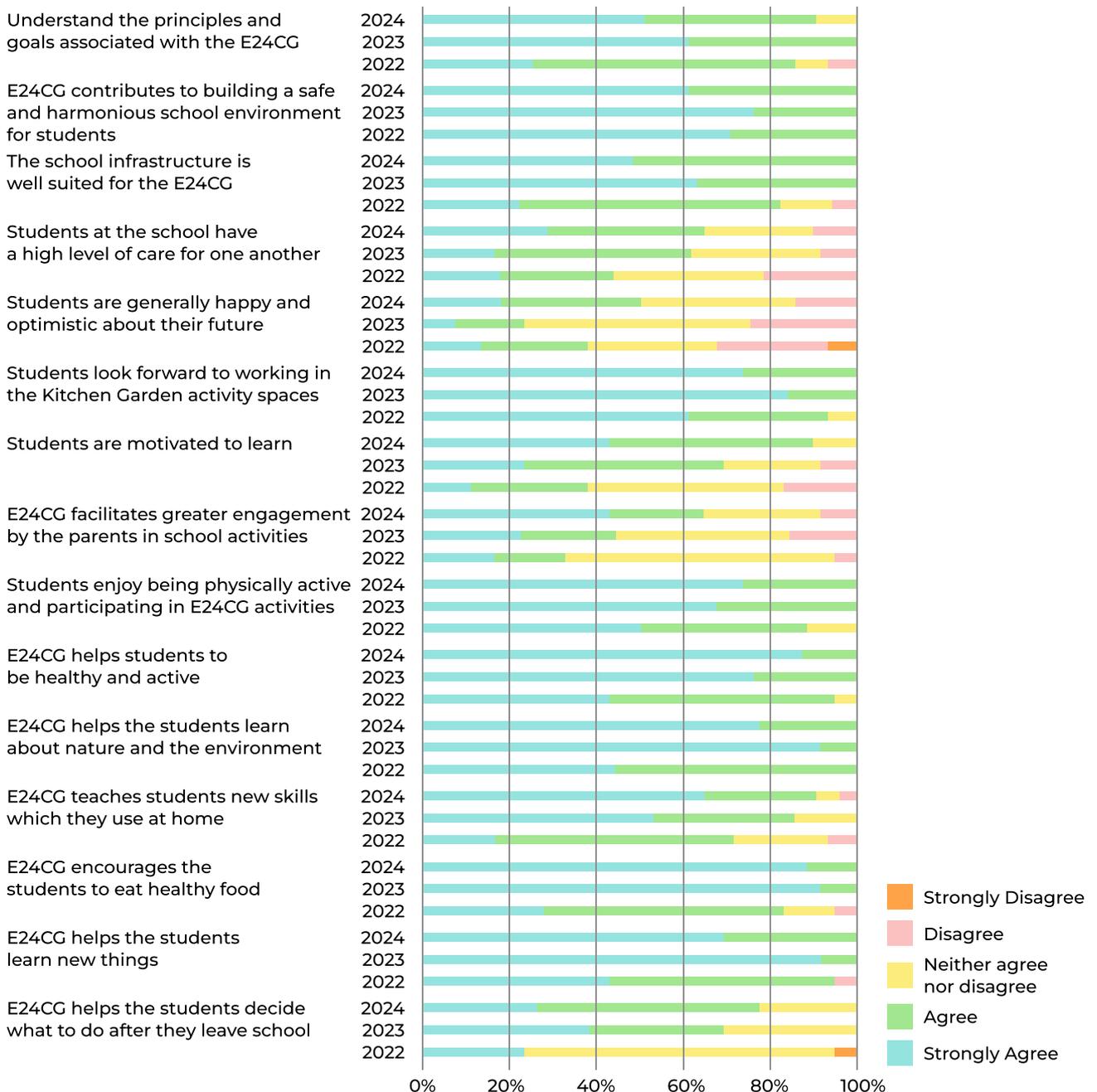
**The skills and lessons they learn in these classes are invaluable and often not taught to them at home, linking to and supporting the HPE curriculum ... have had several students tell me they would like to be a chef or a gardener when they grow up, directly after these classes.**  
 (Anonymous Staff comment, Staff Survey, 2024)

While staff agreement to the non-E24CG specific item 'students are motivated to learn' increased over time, there were no statistically significant differences over the three years for the two other non-E24CG specific items:

- students at the school have a high level of care about each other, and
- students are generally happy and optimistic about their future.

There were no statistically significant differences between the survey responses of teachers and other school staff.

**Figure 1 Staff responses to questions re understanding and perception of impact of E24CG**



While all staff surveyed in 2023 agreed they understood the principles and goals associated with the E24CG, in 2024 two of the 23 staff members, both teacher aides, were neutral in respect to their understanding. This compares to two of 18 staff surveyed in 2022 who disagreed or were neutral.

The following quote from the survey comments sums up the general staff perception of the value of the E24CG for the students:

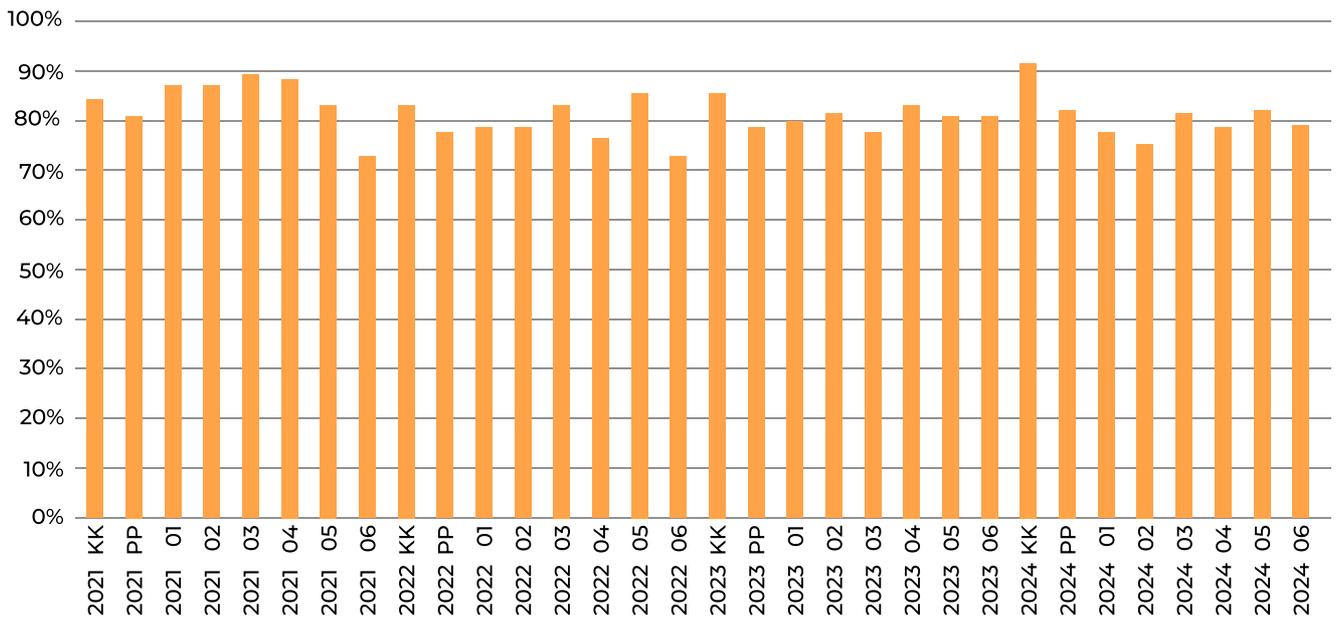
*I am new to CVPS this year and I highly value the KGP. This is the first time I have seen this program at a school and it is a vital program for our community... It is extremely engaging for all students, especially students that need further support with literacy, numeracy and behaviour.* (Anonymous Staff comment, Staff Survey, 2024)

## Attendance data

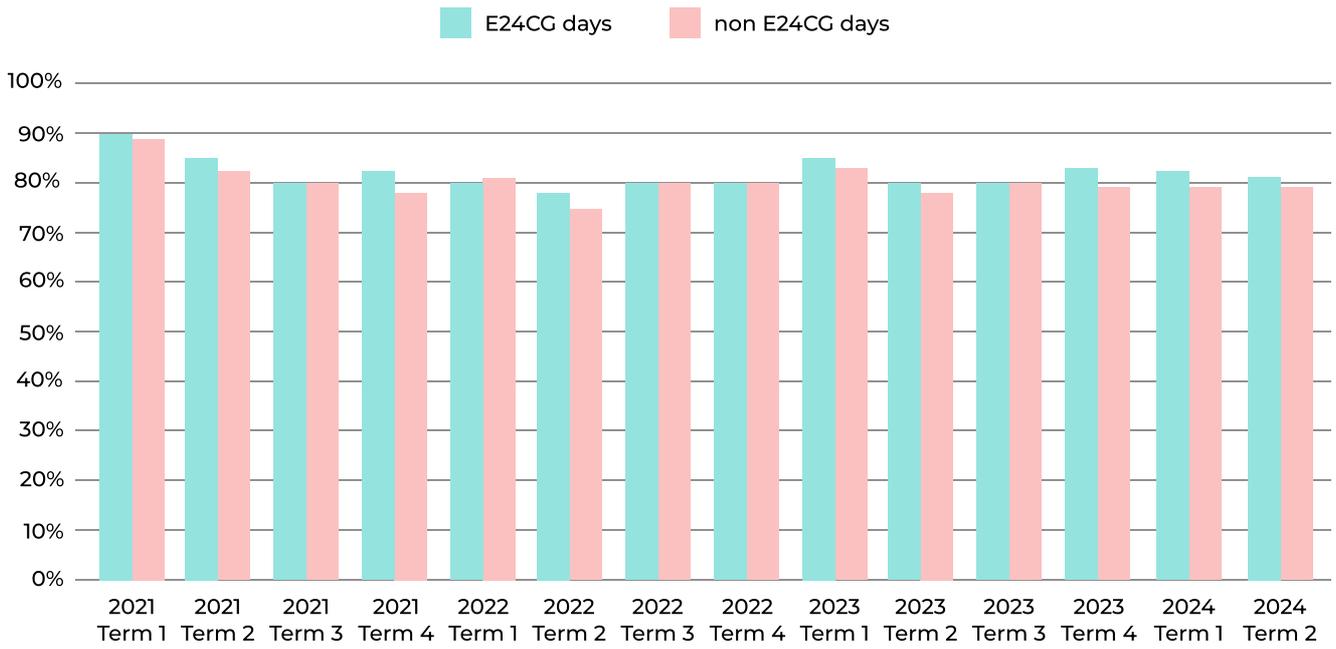
Annual attendance data by year level shows no significant trends over time (Figure 2). The E24CG kitchen and garden sessions run on Mondays, Tuesdays and Wednesdays.

Figure 3 shows average whole school attendance for E24CG days (Mondays, Tuesdays and Wednesdays) compared to non E24CG days (Thursdays and Fridays) for the whole school. Across the four years there is only one term where non E24CG average attendance was higher than E24CG day average attendance (80.9% vs 80.6% in Term 1 2022). As this is whole school data (i.e. population data) it is not necessary to do statistical tests. While it is possible there are factors other than the E24CG which influenced attendance on particular days of the week, this result strongly suggests that E24CG activities positively influence attendance.

Figure 2 Annual attendance data by year level



**Figure 3 Average attendance by term by E24CG and non E24CG days**



## Student wellbeing survey results

Annual student wellbeing survey results were compared for each of the selected items/questions listed in Table 2 as described in the Methodology section. The proportions of student responses in each of the three categories, high, medium and low wellbeing were compared across the four years of data. Table 3 summaries the results of chi squared analysis that compared the proportions of responses in each category to identify the year(s) with the highest (better) and lowest (least) overall wellbeing for each item/question.

**Table 3 Relative levels of wellbeing by year: Student wellbeing survey**

**Loved and safe**

Important adults at school	2024	2023	2022	2021
Connectedness to adults at school	2024	2023	2022	2021
School climate	2024	2023	2022	2021
Safe at school	2024	2023	2022	2021

**Healthy**

Overall health	2024	2023	2022	2021
Happiness	2024	2023	2022	2021
Optimism	2024	2023	2022	2021
Emotion regulation	2024	2023	2022	2021

**Material basics**

Breakfast Access	2024	2023	2022	2021
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**Learning**

Emotional engagement with teachers	2024	2023	2022	2021
Engagement (flow)	2024	2023	2022	2021
Perseverance	2024	2023	2022	2021
Cognitive engagement	2024	2023	2022	2021
Academic self-concept	2024	2023	2022	2021

**Participating**

Satisfaction with life	2024	2023	2022	2021
Friendship intimacy	2024	2023	2022	2021
Resilience	2024	2023		

**Positive sense of culture and identity**

School belonging	2024	2023	2022	2021
Peer belonging	2024	2023	2022	2021

**Key:** wellbeing level

better	mid	lower
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Table 3 suggests that 2022 was a difficult year for students at the school, while 2024 saw students reporting higher levels of wellbeing overall of note is that 2024 wellbeing levels were often higher than 2021. It is possible that challenges in the return to 'normal' school and community life over 2022 following COVID may have had an impact on student wellbeing. Other community factors could be at play. It is also possible that staff changes at the school, including additional kitchen and garden specialists and/or continuity of kitchen and garden programs and the Alternative Learning Program may have had a role in student wellbeing, although it is difficult to draw a firm conclusion.

The section that follows explore impacts of the E24CG in relation to the two overarching evaluation aims. Here, we examine the qualitative data set in relation to the quantitative data. Organised around the two overarching evaluation aims, we paint a more detailed picture of what can be said in respect to how, where and when the E24CG is making a difference.

## **Aim 1) How, where and when does the E24CG align with the goals of the Child and Youth Wellbeing strategies central to this evaluation?**

This section is arranged according to the six themes of the two key strategies.

### **Being loved, safe and valued**

In this section, we discover evidence of:

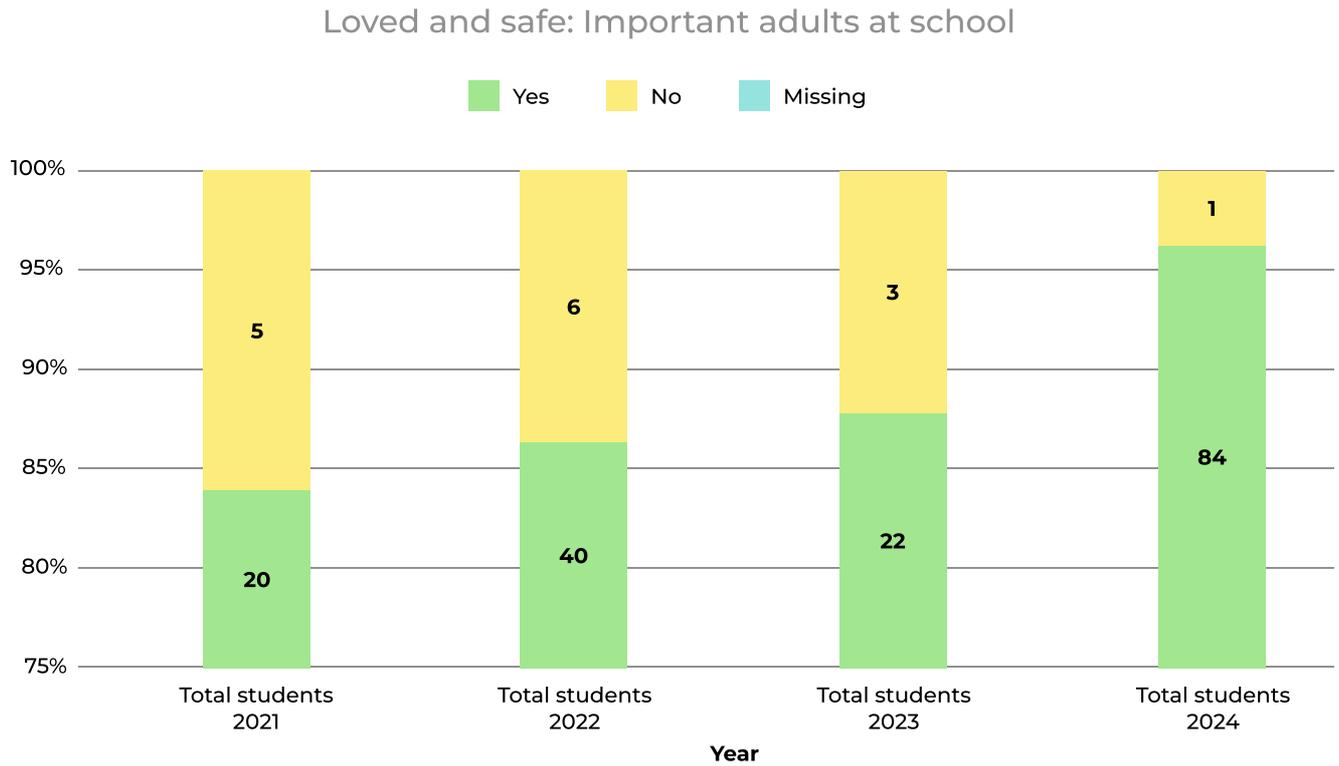
- E24CG spaces providing opportunities for positive relationships to be established and maintained
- increasing sense of engagement between students and adults at school
- a desire to take up further engagement initiatives
- students behaving in ways that point to their feeling secure and valued.

The **staff evaluation survey** showed all 2023 and 2024 surveyed staff, and most in 2022 agreed the E24CG contributed to a safe and harmonious school environment (Figure 1 above).

The **Student wellbeing survey 2021 to 2024** included four questions relating to feeling loved, safe and valued. They were about presence of important adults at school (yes or no), connectedness to adults at school, school climate and feeling safe at school (high, medium or low wellbeing). Graphs below show the distribution of student responses and the number in each category across years 2021 to 2024 for the total of students in three classes (Year 4, Year 5, Year 6) for each year.

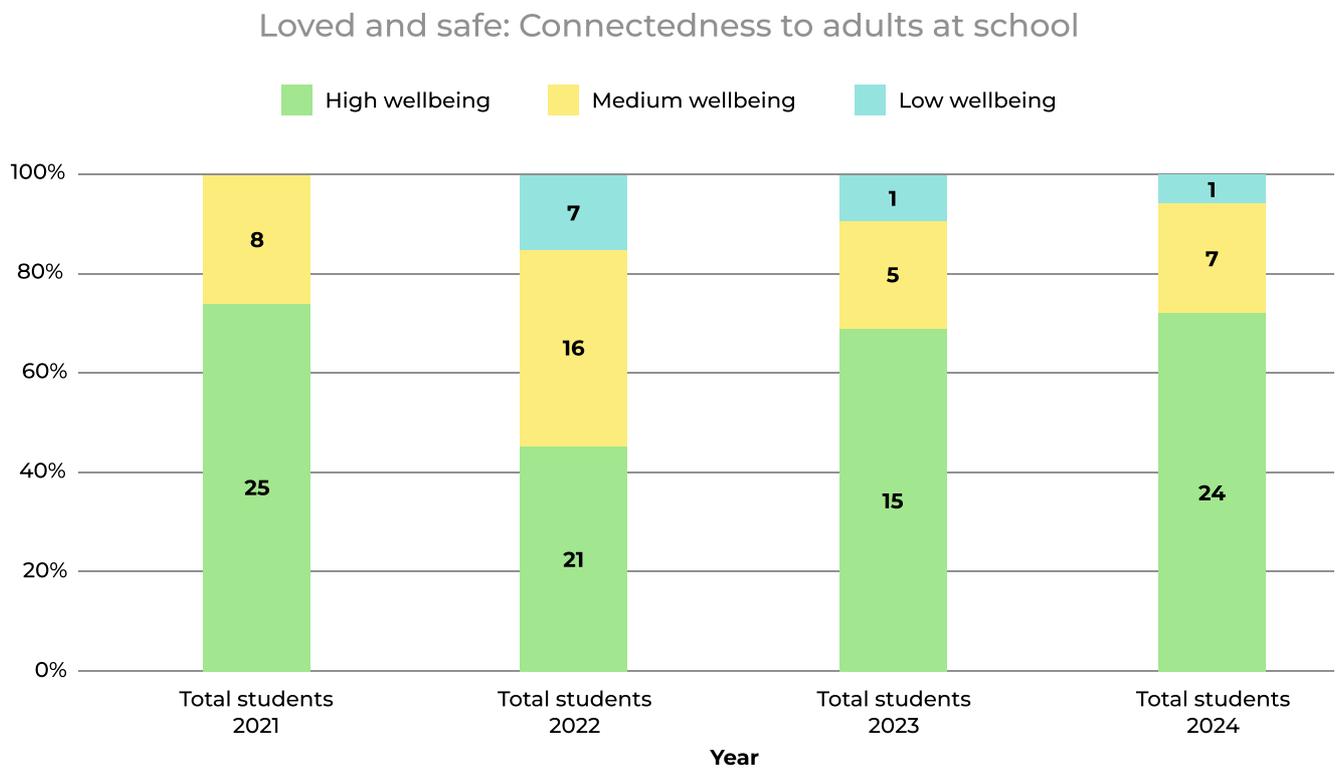
The proportion of students who reported there were important adults at school remained high over the four years, with 2024 being higher than other years (Figure 4). Wellbeing in 2022 was lower than other years for the connectedness to adults at school (Figure 5), school climate (Figure ) and feeling safe at school (Figure ) questions. School climate and safe at school wellbeing was high in 2024, with safe at school also high for 2023.

**Figure 4 Loved and safe: Important adults at school**



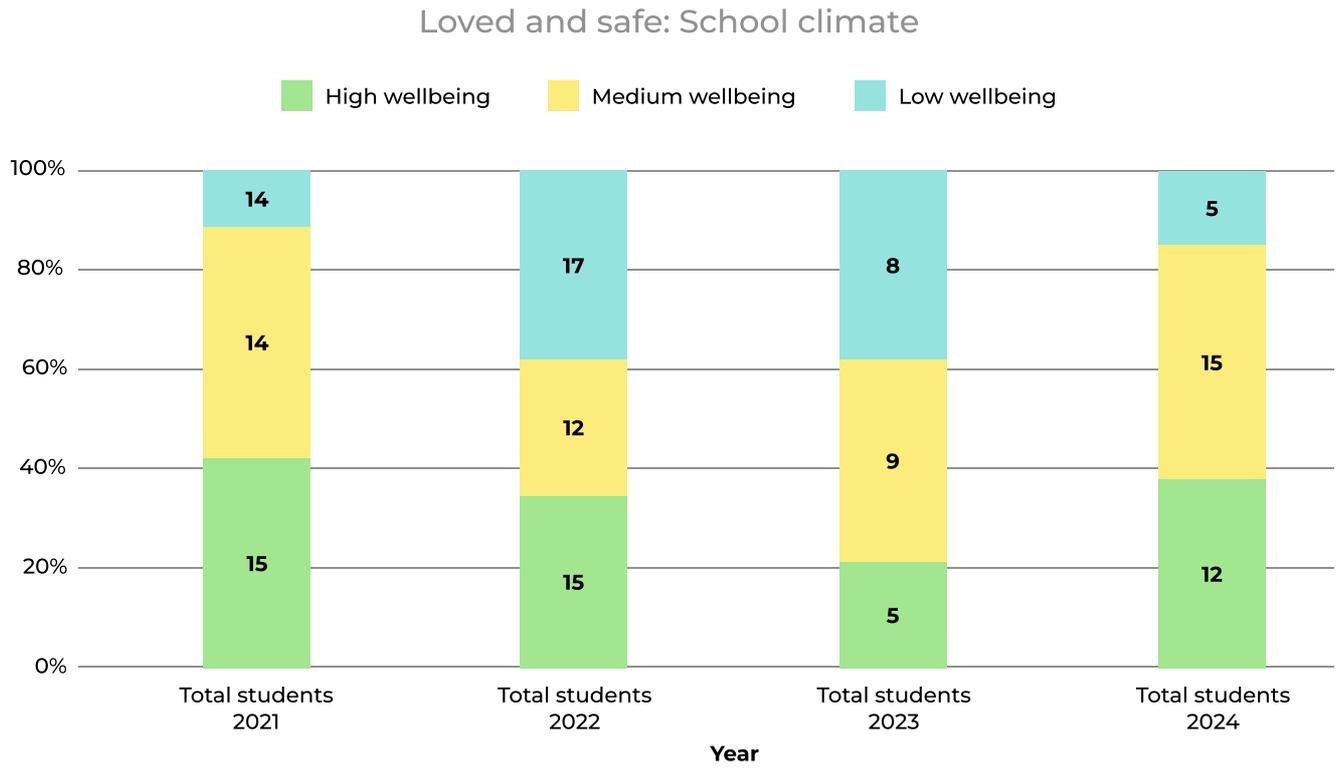
Significantly higher proportion reporting they had important adults at school in 2024 than other years.

**Figure 5 Loved and safe: Connectedness to adults at school**



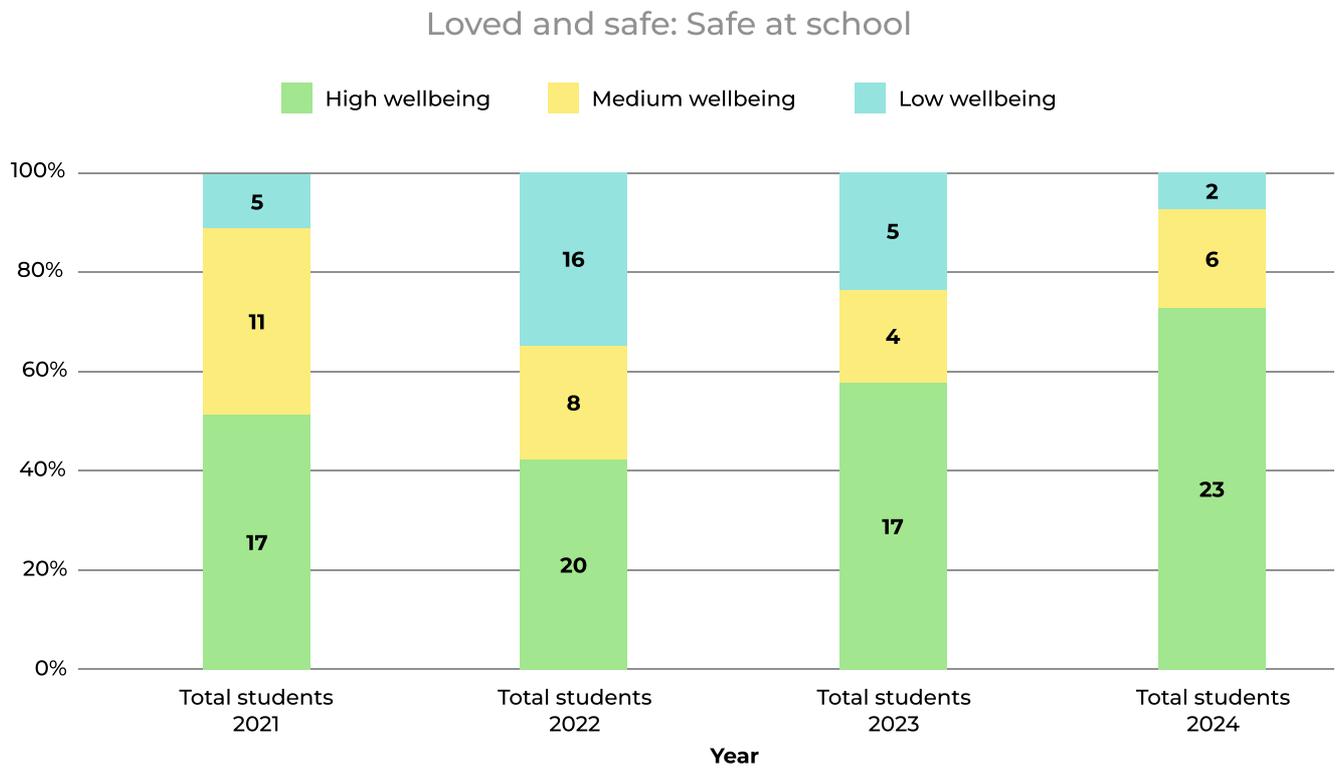
Wellbeing in relation to connectedness to adults at school was statistically significantly lower in 2022 than other years.

**Figure 6 Loved and safe: School climate**



Wellbeing in relation to school climate was statistically significantly higher in 2021 and 2024 than 2022 and 2023.

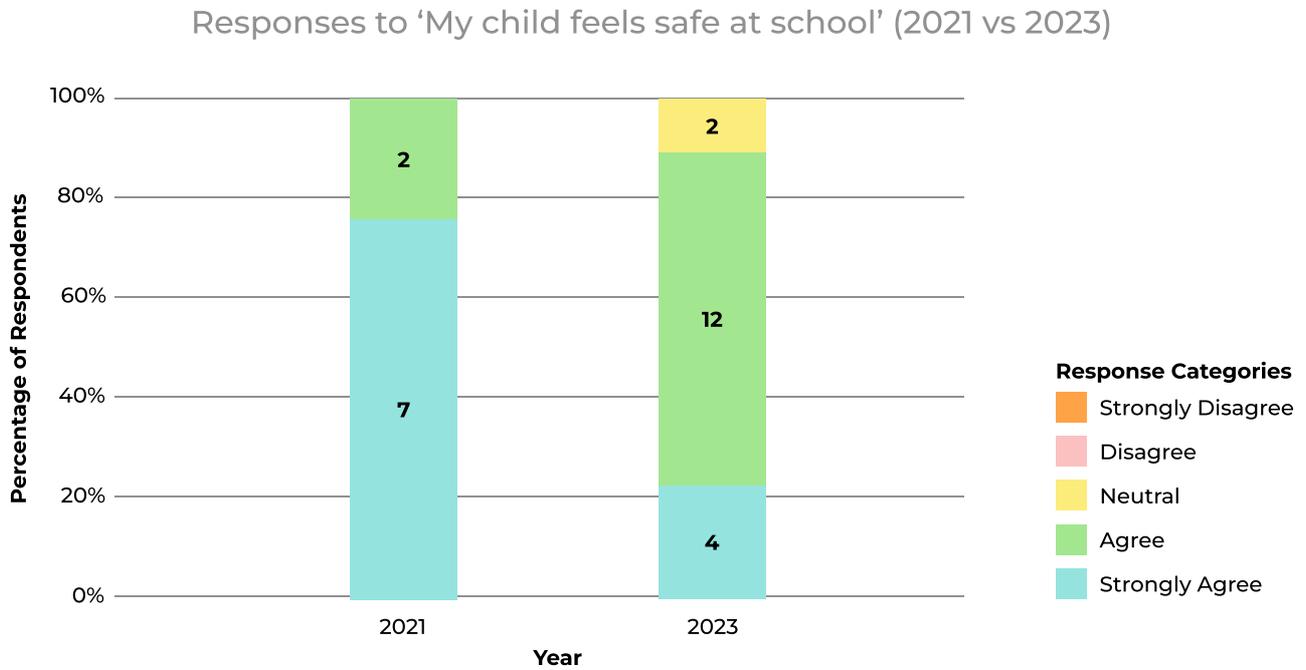
**Figure 7 Loved and safe: Safe at school**



Wellbeing in relation to safe at school was statistically significantly higher in 2024 than other years.

DECYP **Family satisfaction survey** data for the statement 'My child feels safe at school' was only available for 2021 and 2023. Figure 8 shows no families reported their child felt unsafe at school in either year.

**Figure 8 My child feels safe at school: Family satisfaction survey**



Family responses: N=9 (2021), 18 (2023)

**Feel safe about their future, their environment, and the climate**

Interestingly, there was not a statistically significant increase over the three years in **staff evaluation survey** perception that students are generally happy and optimistic about their future, with staff agreement ranging from 39% in 2022, down to 23% in 2023 and up to 62% in 2024 (Figure 1).

*I think that most kids that are here want to be here anyway because **our school is a safe place for them**. But when you bring in the kitchen garden program, I think it makes them feel like **they want to be here**.*

(Staff member 10, 2023).

While data generated in relation to student voice broadly pointed to students feeling secure and hopeful about their future (see discussion Being loved, safe and valued), these feelings of safety and security are not universally held across the participant groups. For example, through conversations with staff members and observations at school events such as the 2024 Winter Feast, we discover some parents and community members are wary of the education system and may have had negative experiences. For example:

*Staff members indicate that some parents are apprehensive about engaging with the school in any format, and parents and community members are **hesitant to volunteer** in the KGP out of lack of confidence.*

(Observational notes. 2024).

Further, in 2023, Staff Member 10 describes how:

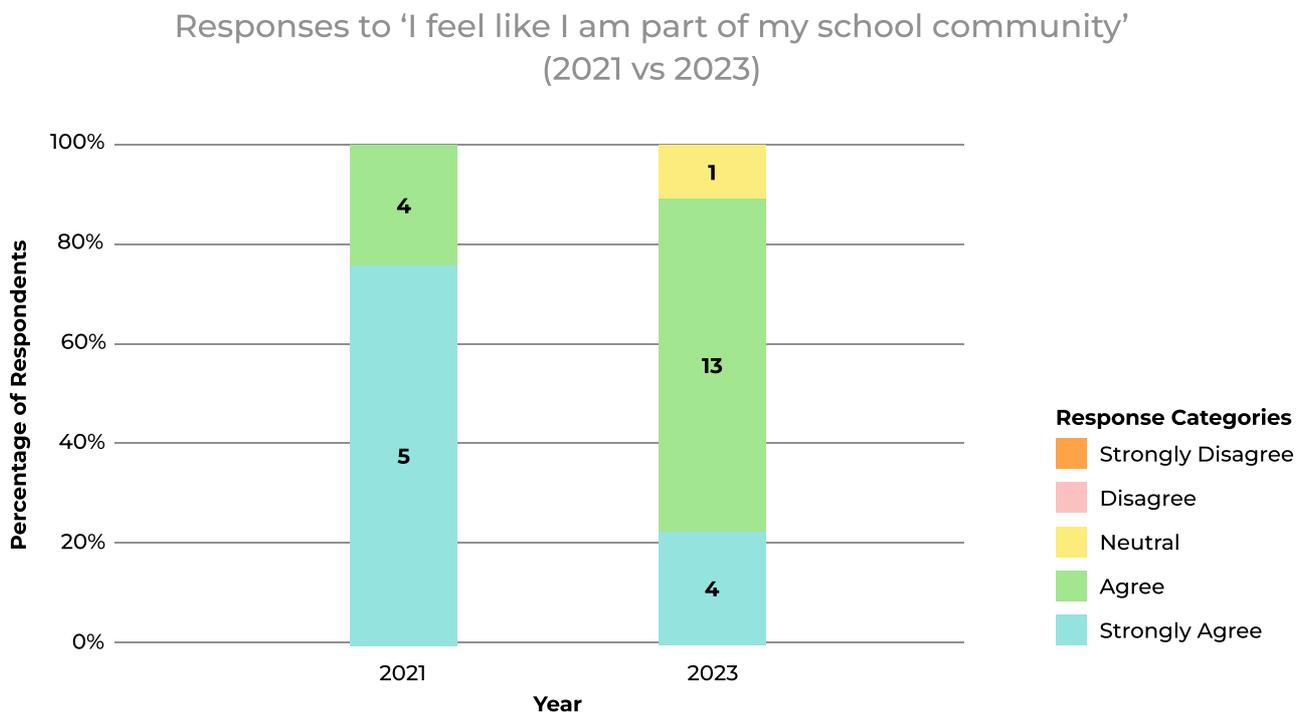
*I haven't [had many opportunities to talk to or work with parents]. And **I didn't think that that I could, or that I was really allowed to.** I think that's just the TAs [Teaching Assistants] here aren't really supposed to be one on one with parents. I think that teachers talk to parents if they need to. If we have any problems or want to say anything to the parents, we just talk to the teachers. I think things can get confused.*  
 (Staff member 10, 2023)

**Build relationships that help them feel safe, valued and respected by teachers and other adults in their lives**

The **staff evaluation survey** showed a statistically significant increase over the period 2022 to 2024 in staff agreement that the E24CG facilitates greater engagement by parents in school activities (Figure 1 above).

The **DECYP Family satisfaction survey** includes the statement 'I feel like I am a part of my school community'. Figure 9 represents the proportion and number of respondents for each response category in 2021 and 2023. The Family satisfaction survey data suggest that families feel they are connected to the school, with none disagreeing they feel part of the school community in either year. However, it should be noted that the number of families responding to the survey was very low, and it is quite possible that those who felt connected to the school were more likely to respond to the survey.

**Figure 9 I feel like I am part of my school community: Family survey**



Family responses: N=9 (2021), 18 (2023)

Evidence suggests that a range of stakeholders recognise and actively take up opportunities to build relationships within the E24CG. A participant staff member describes the imperative of attending to and building relationships, the garden providing a space to do so.

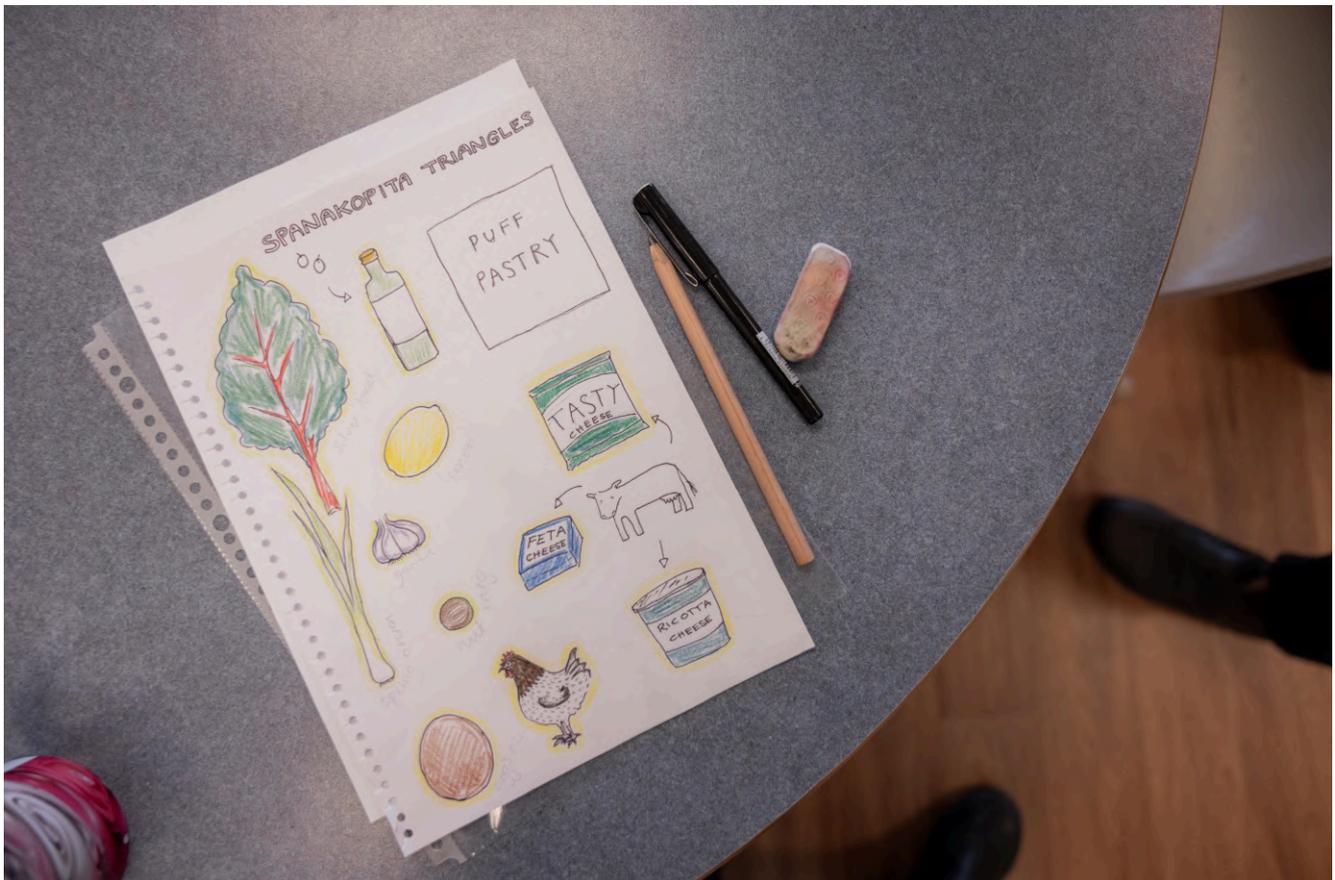
*The main thing between me and students is **building relationships**. We worked closely the first couple terms, using the garden and outdoors as our resource.*  
(Staff member 10, 2023).

This points to teacher and kitchen and garden specialist awareness of relationships as a key enabler for building trust, respect and confidence between stakeholders.

*It's good for the kinders because being their first year at school, they've got relationships with their classroom teachers, but it's a really important skill for them to **build the confidence to interact with other adults in the school**, including other staff and teachers. So, I think it's really successful in that because Staff Member 1 and 2 or 6 are starting to get to know the kids and that'll be that'll really help the **kids build on their skills over the year***  
(Teacher B, 2023).

Teachers' demonstrated ability to leverage E24CG activities to encourage relationship building between students is also apparent.

**Students are working together here.** *They work in small groups. So, teamwork seems to be quite a big thing in the kitchen. The sessions that I've observed students seem to get along. And there's been several times and students have gone out of their way to help each other, which is very lovely.*  
(Observational notes, 2023)



(Photo provided by Rosie Hastie, 2024).

These participant voices point to an underlying understanding of how relationships act as an enabler for success in E24CG activities. This speaks to the importance of fostering strong relationships between stakeholders in context and alongside each other, which is essential for setting up students to achieve educational success (Castle & Grant, 2023; Korpershoek et al., 2020).

*I noticed this week that two of the **students had started to play together** really nicely. So, I decided to send them off to the kitchen together to really kind of **build on that friendship and that shared experience**. So I think it can be really beneficial in that way like to be able to have these special small group activities where they can **get to know each other**, interact a little bit more and **have a shared experience** to then come back and also tell their peers about, which they love.  
(Teacher B, 2023)*

Teacher A highlights how activities within the E24CG spaces enable them to engage differently with students, and in ways that help them build rapport with students beyond the classroom.

*The dynamic changes a little bit when you get in there [kitchen/garden]. It takes away the burden of having to plan and having to orchestrate [activities] and it's nice to be able to **be on an even level with the students**. That change in dynamic means that they can see all of us in a bit of a different light and you could say, see the more fun side of us. And I think that **really helps the relationship side of the program**.  
(Teacher A, 2023)*

While there is evidence for the kitchen and garden spaces and activities facilitating a range of stakeholders to build relationships where people feel secure, valued and respected, these need to be further enabled. These could be enabled through increasing engagement events that enable families and other community members to work alongside students and school staff in the kitchen and garden, or to attend events that showcase E24CG activities or the food they produce.

***It is a community garden** as three partners- the school, the Neighbourhood Centre and the Child Family Centre- have access to the garden. So, we try and be a bit of a conduit for those parties to communicate to help **promote the space to the broader community**. For example, in spring we did a spring pizza oven and planting day. We promoted it across the community. We encourage mums and kids and mums and dads, and everyone to come along. And we just showed people how to plant what to plant when to plant... [But] things can be difficult **in the school to organize events** and days off site.  
(Stakeholder 1, 2023)*

(Photo provided by Yasmin Mund, 2024)



## Having material basics

In this section, we highlight evidence of:

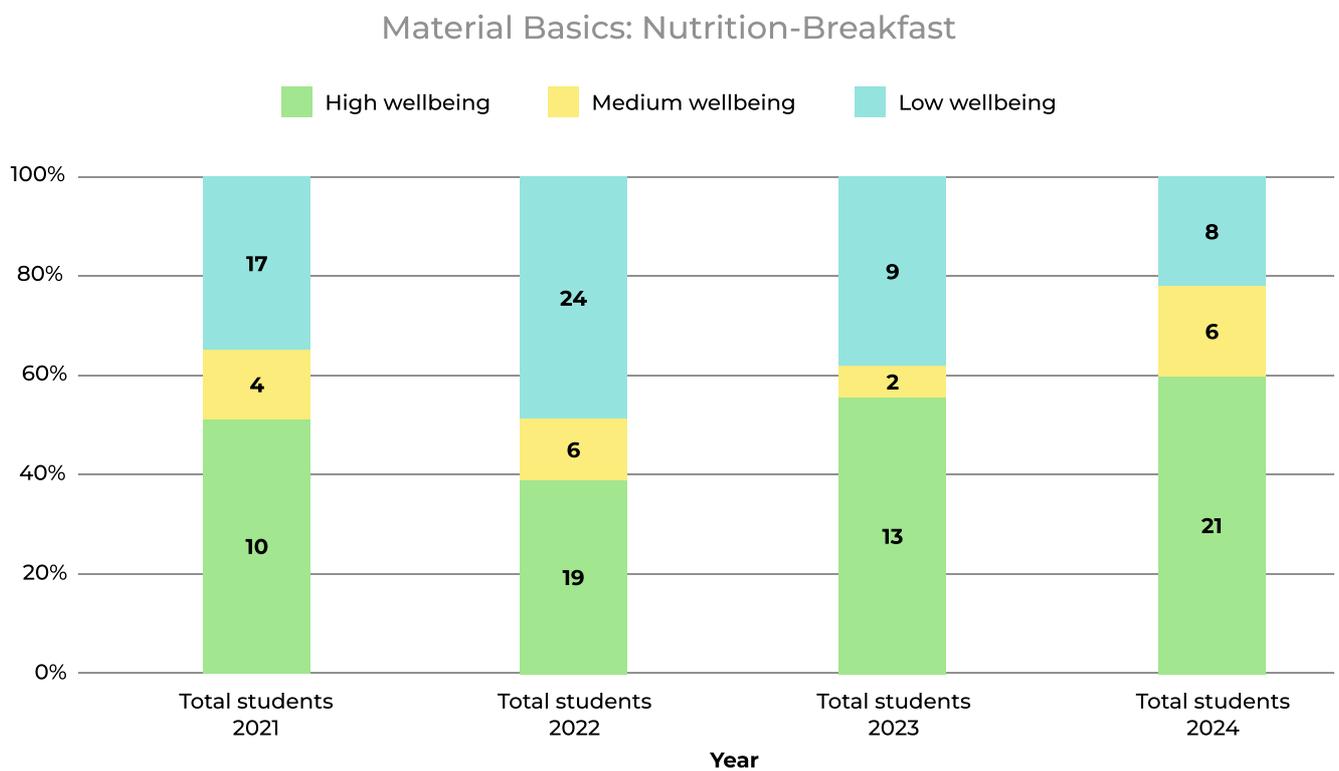
- increased opportunities for access to material basics (nutritious food, outdoor/green spaces) via the kitchen and garden spaces
- positive shifts in food preferences and choices at school
- scope for further permeation and uptake of these positive shifts beyond school (i.e at home)
- students taking up and enjoying opportunities to be physically active in E24CG contexts.

## Have access to nutritious food

The **staff evaluation survey** shows most respondents in 2022, 2023 and 2024 agreed the E24CG encouraged students to eat healthy food (Figure 1 above). This agreement is similarly reflected by a number of interviewees who were able to point to a positive shift over time, and outcomes of students’ being able to access and eat healthy food.

The DECYP **Student Wellbeing survey** asked about access to breakfast. Figure 10 shows that the proportion of students reporting they had low wellbeing (limited consumption of daily breakfast over a week) declined significantly between 2022 and 2023, coinciding with an increase in the number of days breakfast was provided at the school.

**Figure 10 Access to breakfast: Student wellbeing survey**



Wellbeing in relation to access to breakfast was statistically significantly higher in 2024 than other years.

Free food that is readily accessible in a setting where fellow students are experimenting and eating new things encourages student to make nutritious choices at school.

*I always used to pick the snow peas and eat them. (Bayview Secondary College, Student Focus Group participant, 2024).*

At the start of the evaluation, staff expressed concern at the poor-quality food available to children.

*It's been a good educational journey for our families. When I first got there, the canteen was pretty much running on nuggets and pies. And **the kitchen garden program has educated our students** and has **helped educate our families**, because their taste palettes have matured and they've actually given things a go. (Staff member 3, 2022)*

*They have very specific eating habits here at Clarendon Vale, and in their lunch boxes **they bring lots of packaged foods**, lots of **extremely unhealthy foods**, so I think it gives the opportunity not just for the students, but also for the families to see that **there's a different way of eating**, and it could be a much healthier way of eating. (Staff member 4, 2022)*

Direct student involvement in growing and cooking some of that food gives a sense of pride and ownership of the food that also encourages consumption, both at school and at home.

*When I first came to Clarendon Vale there's no way that parents would have even thought about making zucchini slice. (Staff member 3, 2022)*

The free produce cart introduced in 2024 for the purpose of giving away free surplus produce to community members has further increased access to healthy food for families. Much of the surplus produce shared is that which has been grown in the garden and encourages students to try new foods.



(Photo provided by Rosie Hastie, 2024)

Some kids have tried most things that are in the garden, but **they're often reluctant to do so** until it's put to him that 'You helped grow that, wouldn't you like to taste what it's like?'. Just try a little tiny bit, and often they like it.  
(Parent/Community member 1, 2024)

Staff spoke about recipes going home from school, either via the students or the school newsletter.

We put some of the recipes in our newsletter and **encourage families to cook them** when they get home and encourage the students to talk about that as well.  
(Staff member 4, 2022)

While the recipes do appear to permeate homes, it appears they receive mixed reactions from parents and caregivers.

From nutrition point of view, the **students are cooking different things that they might not necessarily have at home**. And I know examples of parents saying to me 'ohh, then the kids came home and wanted spinach and ricotta rolls!' And then there's the parents who are a bit like 'ohh I don't want to have to make that.' Because they're not familiar with it, it might be recipes or skills that they don't know. But it just shows that the kids are then going home.  
(Staff member 2, 2022)



(Photos provided by Rosie Hastie, 2024)

Our observations and conversations with parents, grandparents and wider family at the 2024 Winters' Feast confirmed use of some of the recipes. In some cases, the reasons given for uptake of the recipes was because their 'fussy eater' children enjoyed eating them.

*She brought often brought home some chilies and some vegetables with her, and we used them... she often brought stuff home to being, and she often brought samples of the cooking home that she did with [staff member] as well. But **she always came back being proud of what she cooked.** And bringing recipes back, wanting to try them.*  
(Parent/community member 4, 2024)

Despite the easy availability of free, healthy food over the course of the evaluation, the data indicates that there is still room for improvement. This is especially in respect to how their discoveries and learning do or don't translate to making nutritious food choices beyond the school.

*Unfortunately, even with the lunch program, **we continue to see unhealthy lunchboxes with multiple packets.** We are hoping that with time, parents will start seeing the financial and health benefits of engaging with the lunch program.*  
(Staff member 1, 2023)

*I think maybe they thought there'd be more of a change to the foods they would bring to school... We maybe haven't seen as much of that as we wanted because the kids still basically just bring Doritos and chocolates for morning tea that they want to have at 9:00 AM.*  
(Teacher A, 2023)

*At the Winter Feast there was a harvest table set up with food from the garden at CVPS, this was for parents to take home. Note: this was still **mostly full at the end of the event.***  
(Observational notes, 2024)

### **Have access to outdoors and green space**

All staff responding to the **staff evaluation survey** in 2023 and 2024 along with 89% in 2022 agreed that students enjoy being physically active and participating in E24CG activities (see Figure 1).

The attractive layout of the garden and its location between the school, Child and Family Centre and Neighbourhood House provides a welcoming green space for students and the community.



(Photo provided by Rosie Hastie, 2024)

*I think it's exciting; cooking and **going to the garden is a fun thing**. It's better than staying indoors. They love learning about food. They love eating and they love cooking food. **They love getting involved**, especially our kids.*  
(Staff member 10, 2023)

Students too appreciated the opportunity to be outdoors in the garden and participate in the learning opportunities that enabled.

**It's good to have activity outdoors.** It's good education to learn about plants and have fun. It was really fun. Like scarecrows and stuff.  
(Bayview Secondary College, Student Focus Group participant, 2024)



(Image courtesy of evaluation team, CVPS dataset)

*We'll plant the seeds and watch the lettuce grow, we'll water it and talk about it. We'll go out there every week and we watch it grow. So it's **benefiting their range of understanding for the garden** and how we actually grow things.*  
(Staff member 10, 2023)

A parent expressed gratitude for the garden spaces, and the benefits they perceive it to create for their child was an Alternative Learning Group student:

**It was her place.** *If something went wrong at school, they would let her go to the garden. She'd just go chill out in the garden by herself or with [a staff member], or the dog. So yeah, she was always allowed to just go chill if she needed to.*  
(Parent/community member 4, 2024)

The upgrade of the Wingani sensory courtyard has provided purposeful access opportunities for students. These opportunities were enabled via participating in the design and work involved in upgrading the space. Further to this, the upgraded sensory courtyard continues to offer a space for students to calm and ground themselves.

*Staff member 10, who's the Alternative Learning Specialist here, has developed these small plots. One particular plot will have grass in it. And the idea here is to fill it up with different items that have different textures and sounds, so that students can come in and feel and listen to and walk over these different textures. (Observation notes, 2023)*



(Images courtesy of evaluation team, CVPS dataset)

## Being healthy

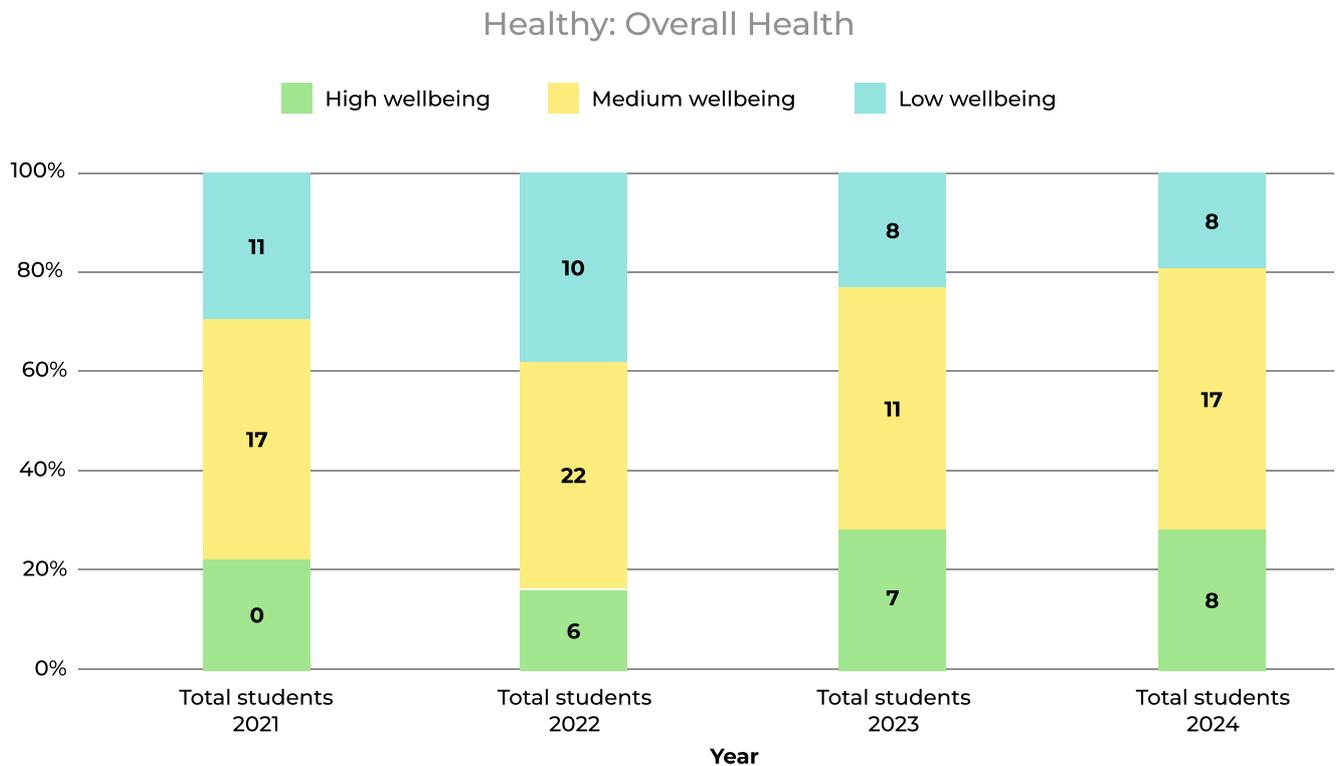
In this section, we point to evidence of:

- perceptions of improved health
- preparedness to try new foods
- some healthy food behaviours extending beyond the classroom
- limited evidence that healthy eating habits are being adopted at home.
- enjoyment of being physically active
- behavioural, self-concept and mental health benefits from E24CG activities.

All those responding to the **staff evaluation survey** in 2023 and 2024, along with most in 2022, perceived that the E24CG helps students to be healthy and active (Figure 1).

The DECYP Student Wellbeing survey responses showed a greater proportion of students reported high wellbeing in 2023 and 2024 than in other years (Figure 11).

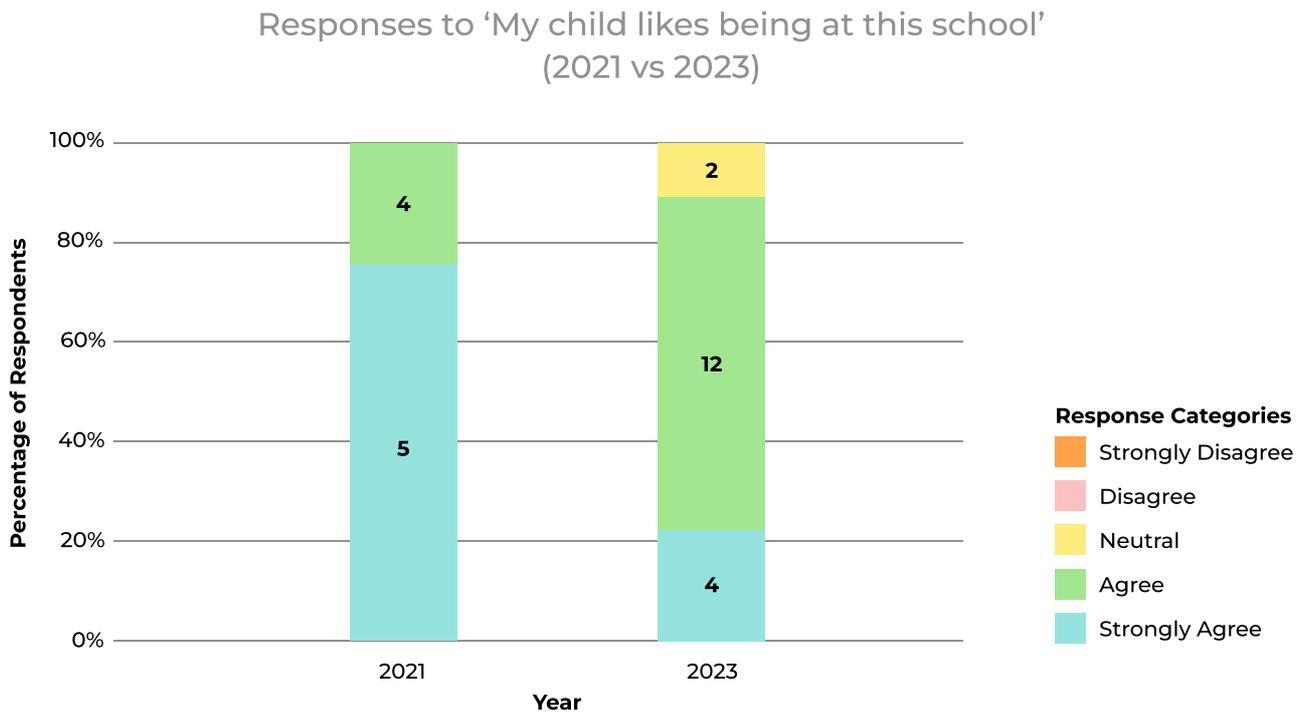
**Figure 11 Overall health: Student wellbeing survey**



Overall health wellbeing scores were statistically significantly higher in 2023 and 2024 than 2022.

The DECYP **Family satisfaction survey** included the statement 'My child likes being at school' in 2021 and 2023. Figure 12 represents the percentage and number of respondents for each response to the statement and shows that no family responding disagreed with the statement in either year. However, as noted previously, families responding to the survey are more likely than others to feel connected to the school.

**Figure 12 My child likes being at this school: Family satisfaction survey**



Family responses: N=9 (2021), 18 (2023)

**Build health literacy**

In addition to increased access to nutritious food, there are strong indicators for students' being supported to build health literacy. Health literacy refers to an "individual's ability to gain access to, understand and use health information and services in ways that promote and maintain health and wellbeing" (Australian Curriculum and Reporting Authority [ACARA] 2016, p.8). Health literacy is one of the five key propositions underpinning the Health and Physical Education (HPE) Learning Area of the Australian Curriculum. Here, health literacy is understood as a personal and community asset to be developed, mobilised, communicated and evaluated, (ACARA, 2016; 2023)

*In terms of **their literacy** of understanding all the different foods and their uses - **this has significantly improved**. And I really think that it's because of that exposure from a kinder level.*  
(Staff member 1, 2024)

The extent to which it extends beyond individuals and the classroom is inconclusive.

*A lot of [students] wouldn't [have access to things like a garden and cooking opportunities at home]. Probably parents are too busy.*  
(Community member 1)

*[My kids] want to get in the kitchen with me, but I sometimes struggle as I have two little ones and it's a bit hard. But you know, they like to help fill the vegetables and put them in the pot... [my son] has just started helping with the dishwasher and he's just started making his own toast and things like that.*  
(Community Member 3, 2024)

But a community member saw potential benefits.

*Teaching kids about where veggies come from and how they grow and all fruit and veg really... They're probably more likely to try something when they've helped grow it, nurture it, and then also they bring that in sometimes and cook things and think "okay well I might give that a go.*  
(Community Member 1, 2024)

The social determinants of health (SDH) are the conditions in which people are born, grow, live, work, and age (World Health Organisation, 2011). They include a range of factors that influence health, many of which the individual has varying degrees of access and control over; for example, agriculture and food production. Health Information and values learned by children at an early age have the potential to shape long-term behaviour and develop positive habits and adult health patterns (Nash et al., 2020; Peralta et al., 2024). Health literacy can be an outcome of health education and health promotion (Spencer et al., 2021) and can therefore be conceived as a social determinant in its own right.

In this setting, the fostering of health literacies appears to be embedded in E24CG activities, and more implicit than explicit.

*I think food and health literacy is key and such a central aspect of the program. There's so many new flavours and foods and colours and things that you wouldn't see in the supermarket. There's familiar things, but there might be something like a purple cauliflower. And that can just be mind-blowing for a child, which is fantastic.*  
(Stakeholder 5, 2024)

Here, we can see how Stakeholder 5 perceived the E24CG to enable participants to actively engage in and with food production and agriculture. While only three participants (Stakeholders 2 and 5 and Staff member 1) explicitly spoke about how the E24CG can foster health literacy, the qualitative data set offers evidence for how key stakeholders recognise opportunities to foster literacy through E24CG activities, many examples relate to expressive and communicative literacies (see further discussion regarding Learning), rather than building health literacy specifically.

*I think food and health literacy is really, really key and such a central aspect of the program.*  
(Stakeholder 5, 2023)

*And it's amazing how much food has an impact on that story from a very early age... If you can, change that early on for those children that are starting school and progressing through school, then that has a really big difference to the family and they then go on. So intergenerational change. It's part of health literacy.*  
(Stakeholder 2, 2023)

While students may develop health literacy skills at school, these skills do not necessarily translate into healthier behaviours at home (Cruickshank et al., 2024a; 2024b). However, given the challenges that social determinants for health present within the community context of the E24CG, these occasional and isolated instances are still positive and pleasing to see.

### Foster mental and physical health

*Students learn about nutrition. They learn about health and safety.*  
(Staff member 4, 2022)

Much of our data set points to indicators of mental and physical health (being demonstrated/fostered in the E24CG) from the perspectives of staff and stakeholders.

Different stakeholders noticed and spoke about different dimensions of and determinants for students' demonstrated capacity to improve mental and physical health. For example, all staff surveyed in 2023 and 2024 agreed that the school had appropriate infrastructure to deliver the E24CG, and students enjoyed being physically active and participating E24CG activities (see Figure 1). The reasons and factors contributing to how and why they perceived students to enjoy being physically active in the garden are explained by Staff members 4 (2022) and 10 (2023) as follows:

*It's very hands-on and physical.*  
(Staff Member 4, 2022)

*And you can do physical activity because you're outside and you're running around the garden.*  
(Staff Member 10, 2023)

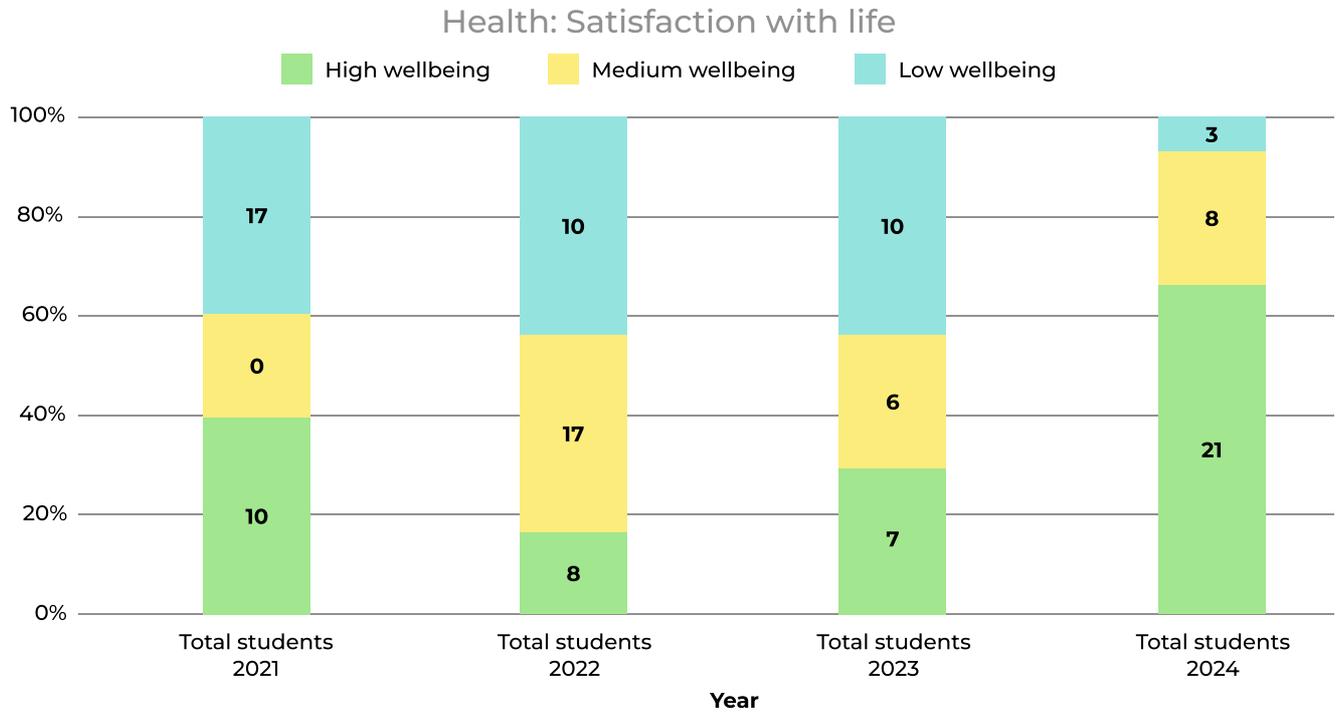
The diverse ways in which indicators of mental and physical health were perceived and understood by evaluation participants varied. In saying this, congruent with findings of wider kitchen garden program research and evaluations (see Badham et al., 2021; Dymment & Reid, 2005; Taylor et al., 2021), there is a broad sense that the E24CG provides a space in which social behaviour, safety and health could be fostered (Dymment & Reid, 2005).

### Regulate their emotions and be happy

The ways in which the E24CG spaces provide means for students to self-regulate their emotions are apparent in our quantitative and qualitative data.

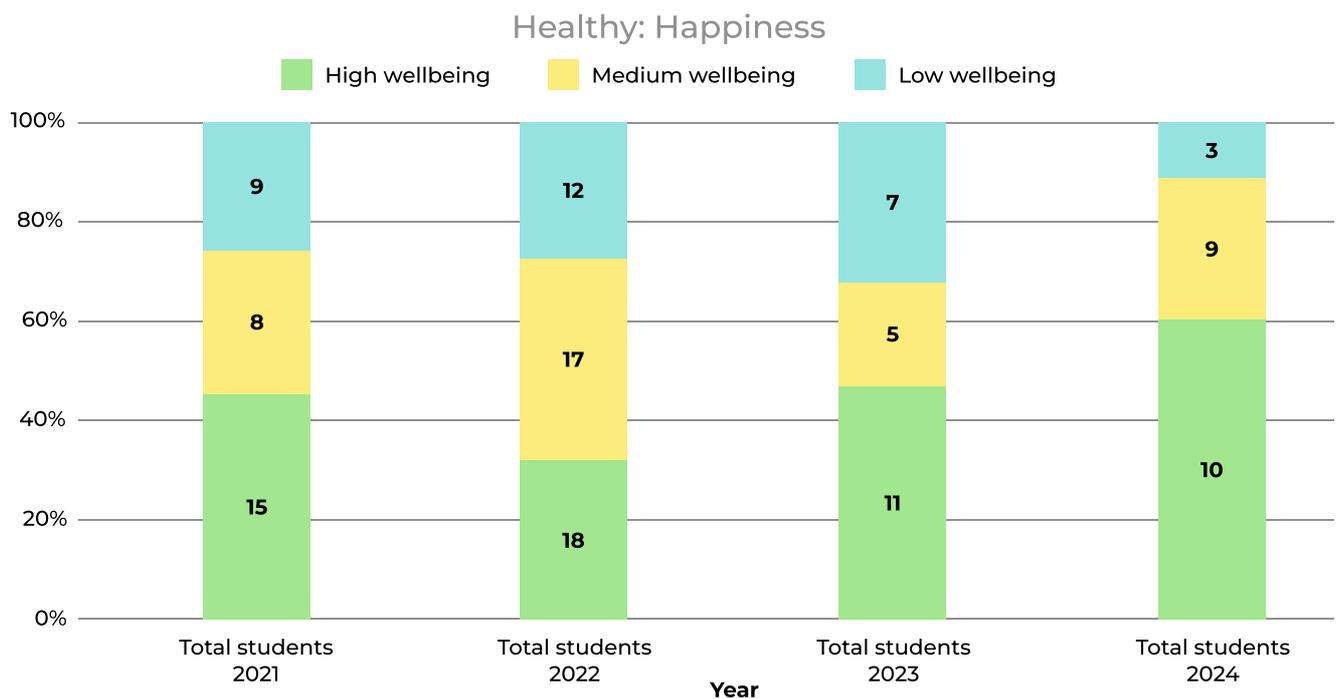
The **Student Wellbeing survey** data measured the happiness level of students by asking them about factors such as satisfaction with life, feeling happy, loving their life, and being a cheerful person to identify the impact of these factors on their overall wellbeing. All were higher in 2024. Satisfaction with life wellbeing was highest in 2024, followed by 2021 and lowest in 2022, with only a small number of students reporting low wellbeing in 2024 (Figure 27).

**Figure 13 Satisfaction with life: Student wellbeing survey**



Satisfaction with life wellbeing was highest in 2024, followed by 2021 and lowest in 2022.

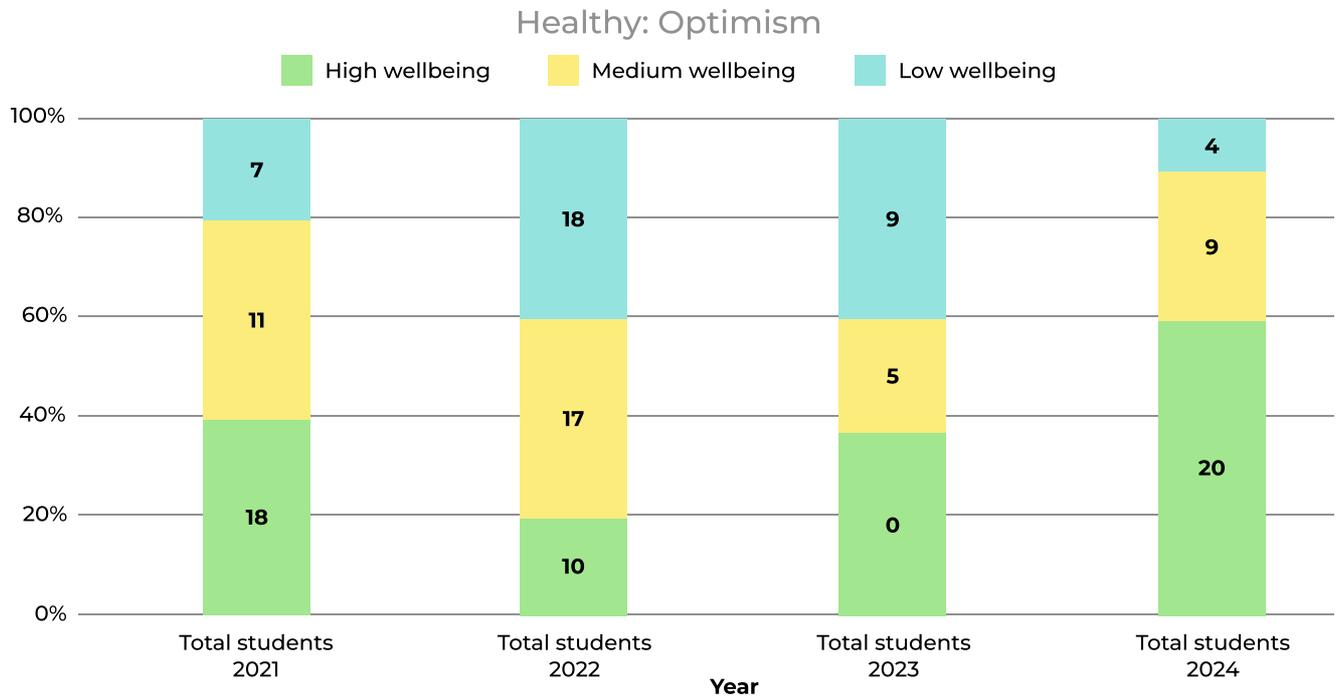
**Figure 14 Happiness: Student wellbeing survey**



Happiness levels of wellbeing were statistically significantly higher in 2024 and lower in 2022 than other years.

Students' optimism levels were measured by asking them about their perception towards various aspects of life, such as expecting and believing they would have more good times than bad. Optimism levels of wellbeing were higher in 2024 and lower in 2022 than for 2021 and 2023 (Figure 15).

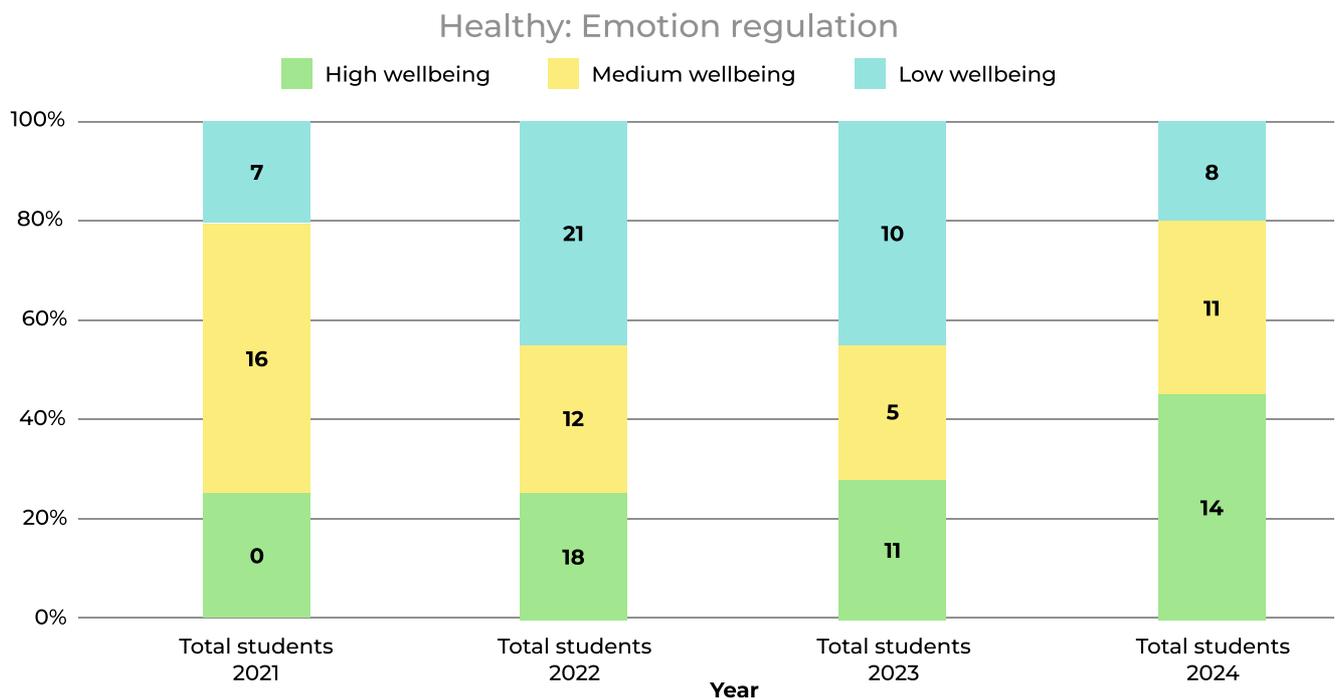
**Figure 15 Optimism: Student wellbeing survey**



Optimism levels of wellbeing were statistically significantly higher in 2024 and lower in 2022.

The **Student Wellbeing survey** aimed to understand how students regulate their emotions and how different approaches to achieving this impact their overall well-being. Students reported that changing their way of thinking about a problem contributed positively to their overall wellbeing, with emotion regulation levels of wellbeing higher in 2024 than 2022 and 2023 (Figure 16).

**Figure 16 Emotion regulation: Student wellbeing survey**



Emotion regulation levels of wellbeing were statistically significantly higher in 2024 than 2022 and 2023.

Much of the qualitative data generated centres around student behaviours encountered in the E24CG. Staff (including teachers, kitchen and garden specialists, and teacher aides), stakeholders (such as staff from the community and neighbourhood centres), and community member volunteers involved in the delivery of the E24CG, attest to how the outdoor spaces (Wingani and the garden) are used by staff to assist students' in regulating their emotions. This is consistent with findings from Korpershoek et al's (2020) exploration of enabling relationships between motivational, socio-emotional, behaviours and academic outcomes in school settings. In saying this, there are examples where some behaviours are perceived as not being conducive to or indicative of good mental and physical health and safety. For example,

*Definitely **behaviour [management], is a challenge** for the program. I see it a lot. Silliness. One time I was cleaning up in the kitchen and packing an order away. Staff member 2 was busy and the teacher was busy. And this child had a knife. And I was like, 'no, stop. That's enough. We don't do that in the kitchen.' Even though it wasn't my place, **I found it very dangerous**, so I came around and said 'I'm going to be working with you guys' and the teacher was like thank you. She can't be everywhere at once.*  
(Staff member 5, 2022)

While many staff and external stakeholders perceive that students enjoy working in the kitchen and garden, student voice presents a mixed sense of enjoyment, particularly for their engagement in the garden. This correlates with findings from Block et al's (2012) evaluation of a kitchen garden program, and that of Lohr et al (2021) highlighting the impact school gardens can and do have upon social and emotional learning. Block et al's (2012) evaluation of a kitchen garden program found that while kitchen activities were 'almost universally popular, reactions by children to garden classes were far more variable' (p. 421).

*The thing is the kids absolutely **love going to the garden**. They go to the kitchen and do cooking, and you know, those hands-on experiences are what they really love and create the most learning.*  
(Teacher A, 2023)

*...it's just full of **laughter and fun**, and you can hear the kids. And **they're so excited**. It's a wonderful experience.*  
(Stakeholder 3, 2023)

*Picking foods and stuff is more fun than planting and weeding, because I always get put in doing like the weeding and stuff.*  
(Bayview Secondary College, Student Focus Group participant, 2024)

While some children indicate their garden experiences as when they were most happy and the garden being the best part of the program, others were much less enthusiastic.

***Kitchen yes [I like]. But I hate garden** because like the dirt gets underneath my nails.*  
(Bayview Secondary College, Student Focus Group participant, 2024)

Student aversions to participating in garden activities resonate with the findings of Block et al's (2012) evaluation. Further to this, Narayan et al (2020) presented pedagogical content knowledge specific to a kitchen garden program, and the pedagogical considerations that should be made to help navigate some of these aversions. Specific reasons given by some children for not liking the garden in Block et al's (2012) evaluation were that it was "boring and unpleasant when too hot or too cold, and that some children did not like to get dirty" (p 421). These findings are highly congruent with the sentiments expressed by one of our Bayview Secondary College focus group participants.

While clearly some students experienced some inhibitors of happiness in the garden, we also find evidence of stakeholders perceiving students' as enjoying their time and experiences in the garden.

*I think the kitchen's more of a skill set building space, like it's quite important to learn how to cook, whereas the garden it's a bit more **let's regulate, lets enjoy**, let's learn but also engage and have fun.*  
(Staff member 10, 2023)

This aligns with Townsend et al., (2014) kitchen garden evaluation, where children commented positively about skill development, relationship building, and enjoyment/fun (p. 241); these all being factors and behavioural indicators of happiness.

## Learning

In this section, we present evidence of:

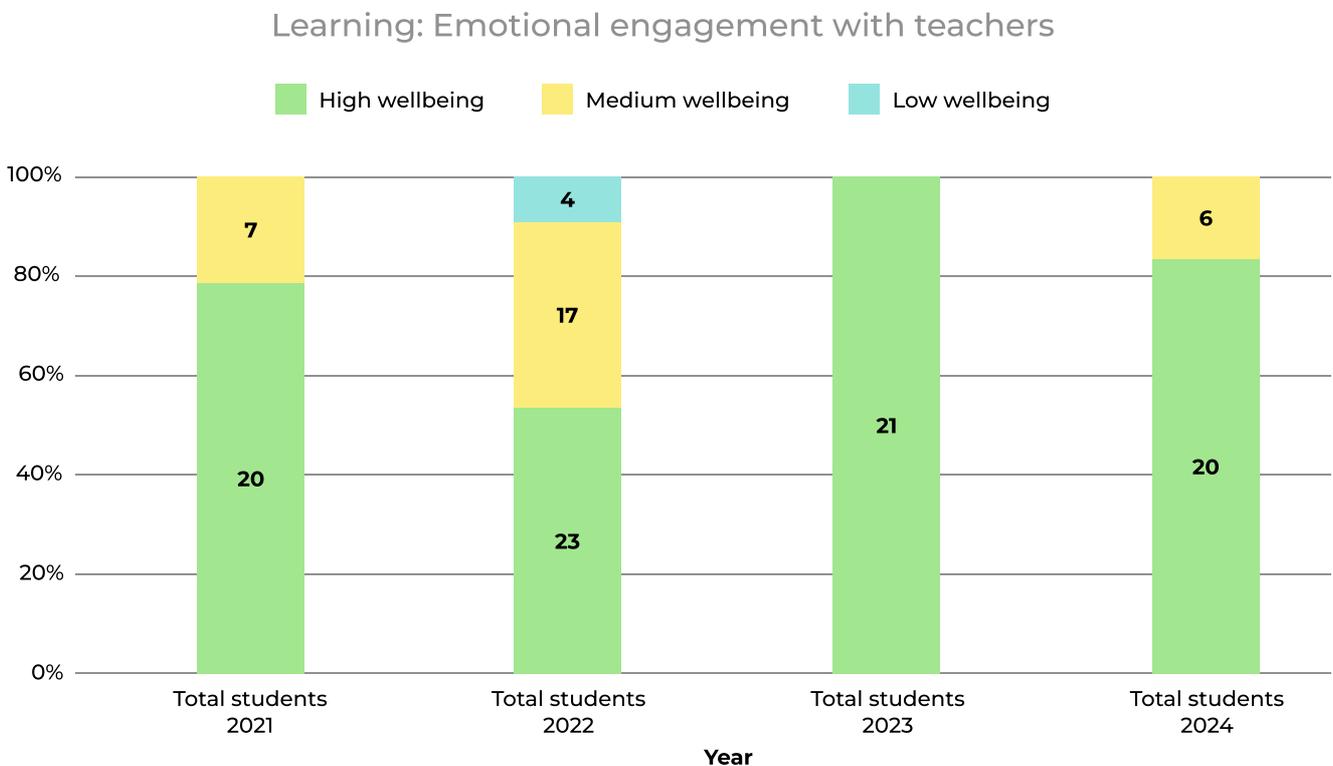
- higher student attendance on kitchen and garden activity days
- how and what learning is enabled by the kitchen, garden and Wingani infrastructure
- the imperative of human resourcing to maximise the E24CG’s potential learning opportunities
- impact of staff turnover on staff capacity to make best use of the E24CG to enable learning outcomes
- some evidence of teachers integrating E24CG learning into their classroom, and vice versa.

The **staff evaluation survey shows that** staff perception that students are motivated to learn increased over the three years (39% in 2022, 91% in 2024). All 2023 and 2024 surveyed staff, and most in 2022 agreed the E24CG helped with academic outcomes of learning new things and of learning about nature and the environment (Figure 1).

Attendance data show consistently higher average attendance on Mondays, Tuesdays and Wednesdays, days when the kitchen and garden activities take place, compared to Thursdays and Fridays (Figure 3).

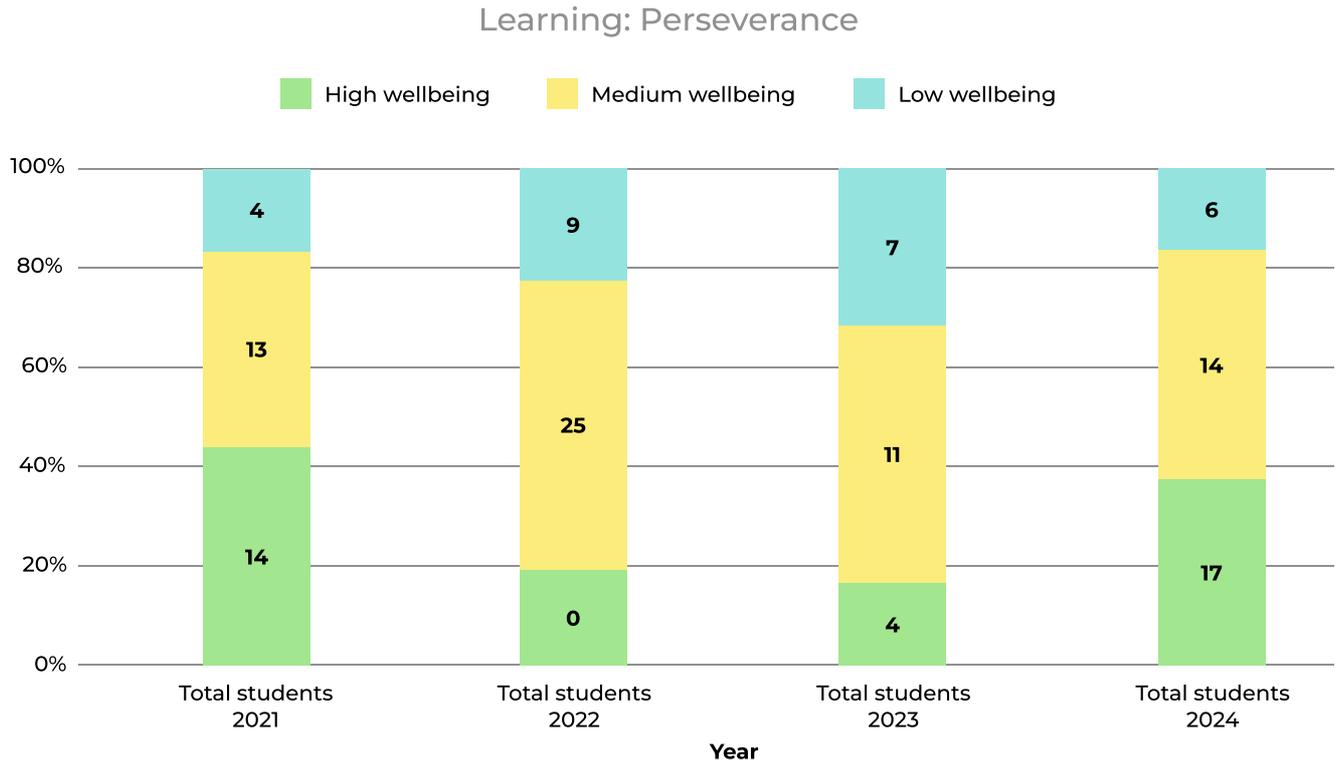
There were four items related to learning on the **Student Wellbeing survey**: emotional engagement with teachers, perseverance, cognitive engagement and academic self-concept. All or most students reported high or medium levels of wellbeing in relation to emotional engagement with teachers each year (Figure 18). Reported levels of wellbeing in relation to perseverance and cognitive engagement were mixed, with 2021 the highest of the four years for perseverance (Figure 19 ). Cognitive engagement levels of wellbeing were higher in 2024 and lower in 2022 (Figure 20 ). Academic self-concept was highest in 2021, and higher in 2024 than 2022 and 2023 (Figure 21 ).

**Figure 17 Emotional engagement with teachers: Student wellbeing survey**



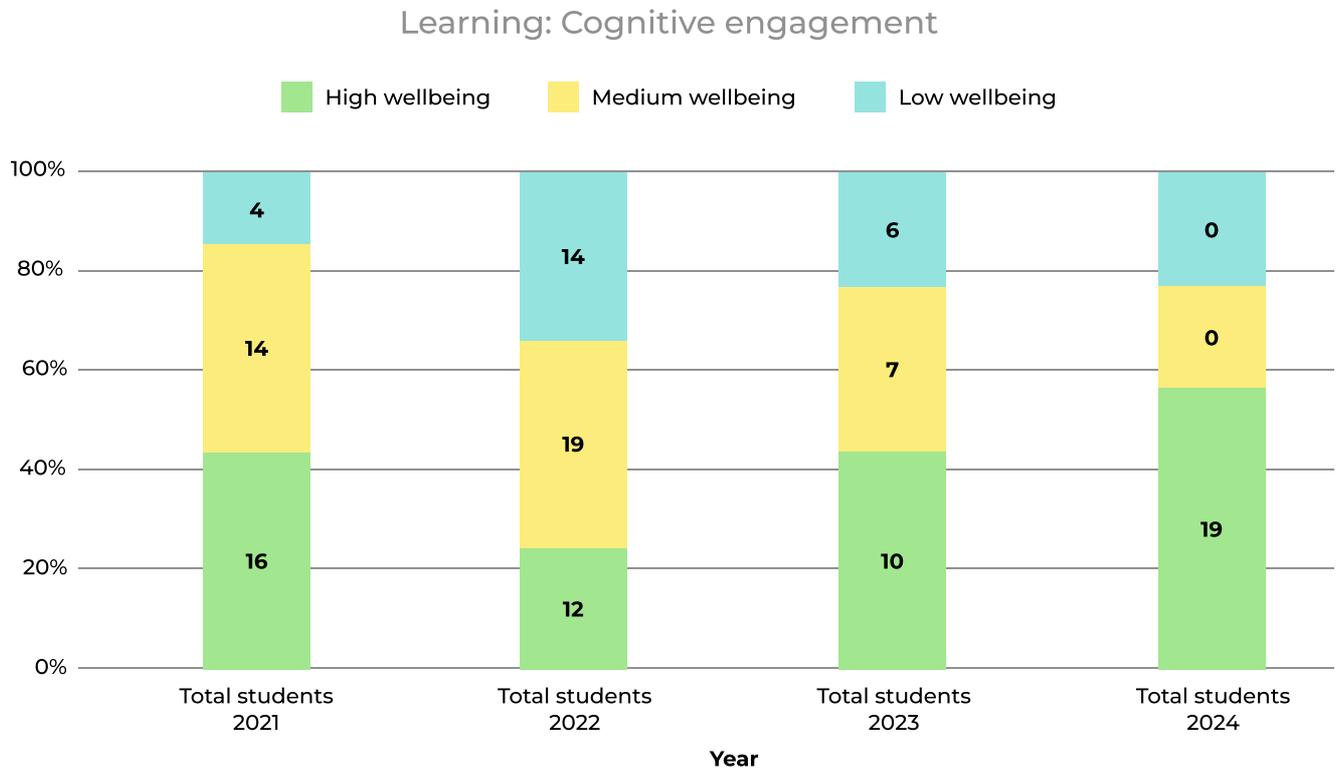
Emotional engagement with teachers wellbeing was highest in 2023 and lowest in 2022,

**Figure 18 Perseverance: Student wellbeing survey**



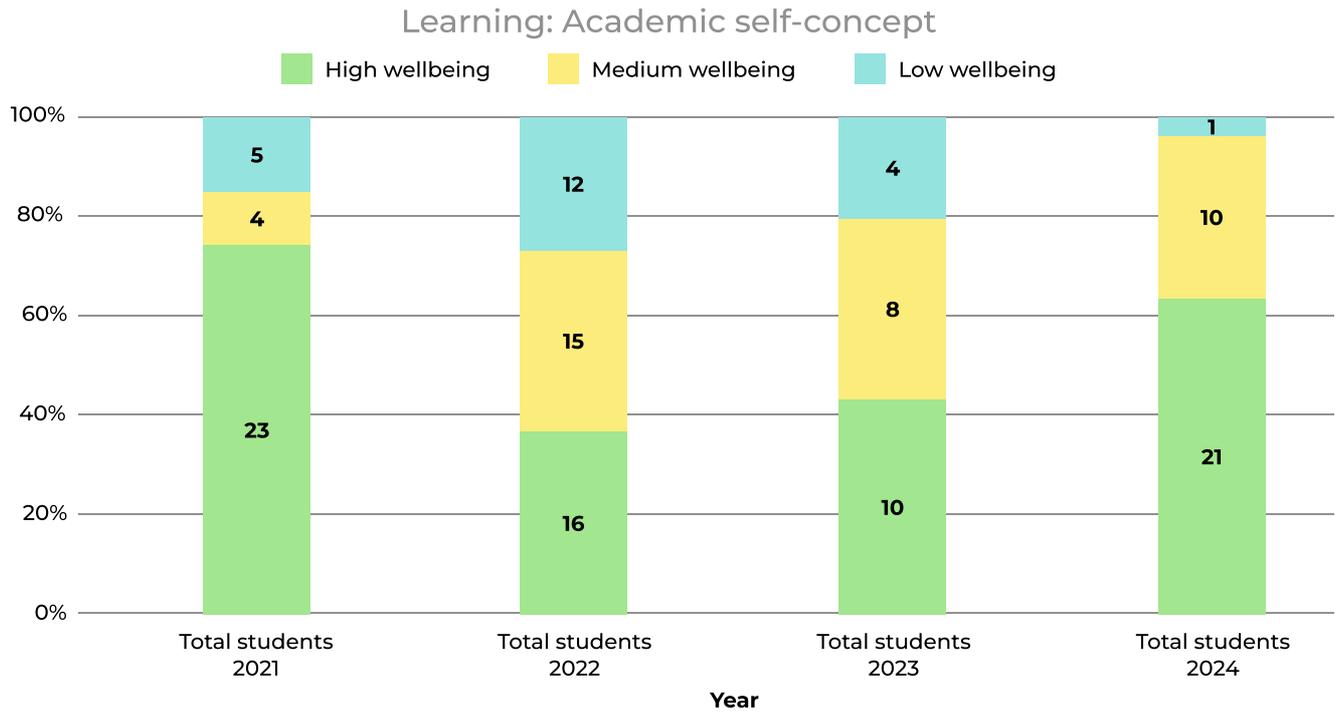
Emotional engagement with teachers wellbeing was highest in 2023 and lowest in 2022,

**Figure 19 Cognitive engagement: Student wellbeing survey**



Cognitive engagement levels of wellbeing were higher in 2024 than 2021 and 2022, and lower in 2022 than 2021 and 2023.

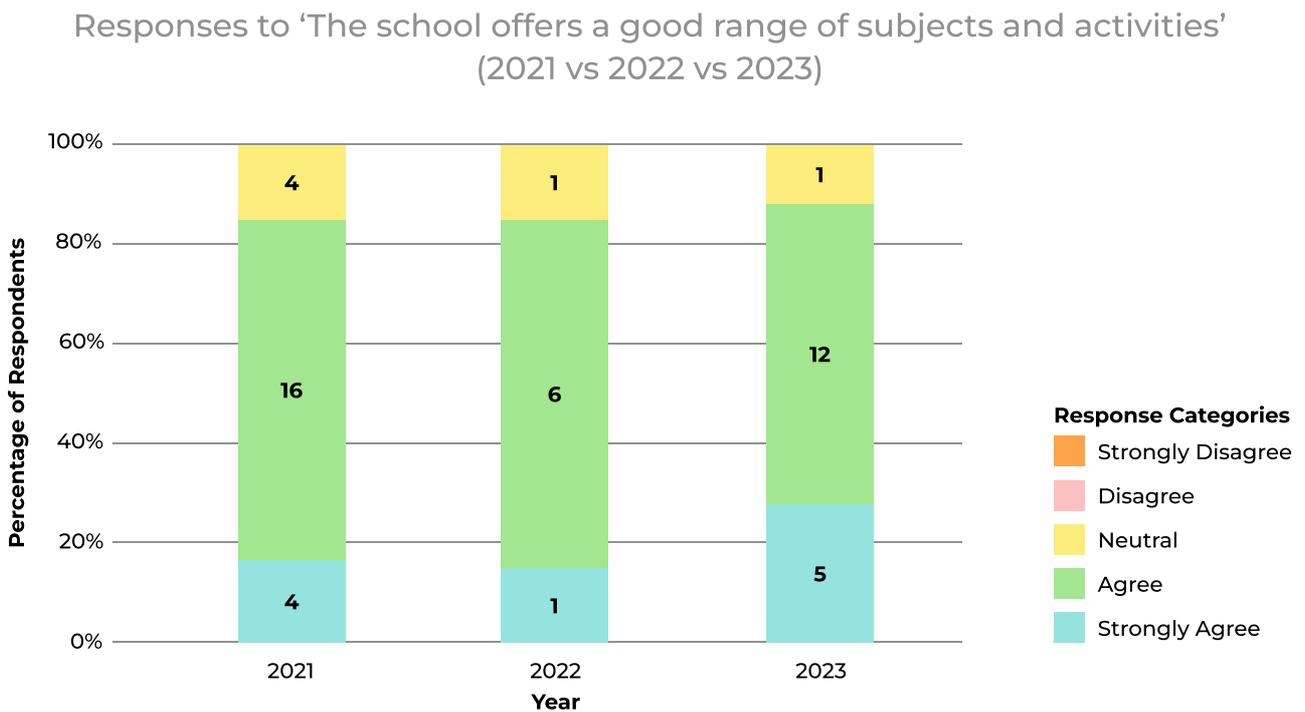
**Figure 20 Academic self-concept: Student wellbeing survey**



Academic self-concept wellbeing was statistically significantly highest in 2021, and higher in 2024 than 2022 and 2023.

The DECYP **Staff satisfaction survey** agreement with the statement ‘The school offers a good range of subjects and activities’ was consistently high over the period 2021 to 2023 (Figure 21).

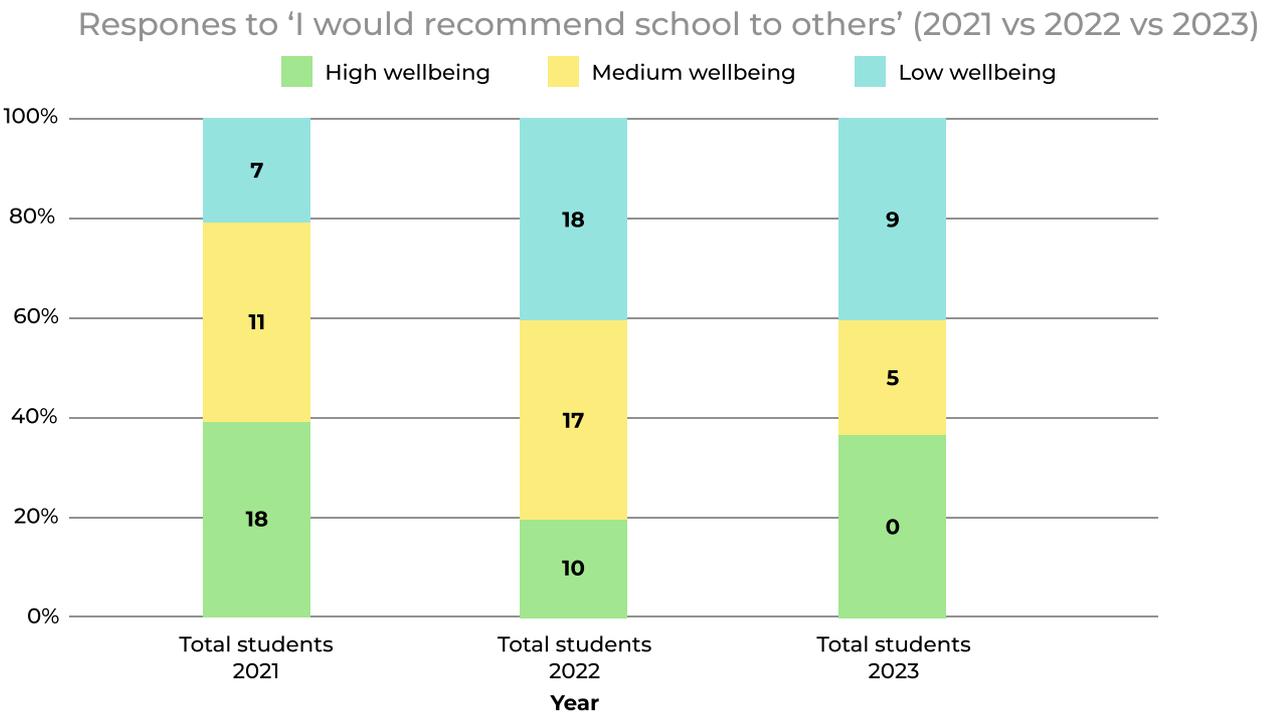
**Figure 21 School offers a good range of subjects and activities: Staff satisfaction survey**



Staff responses: N=24 (2021), 8 (2022), 18 (2023)

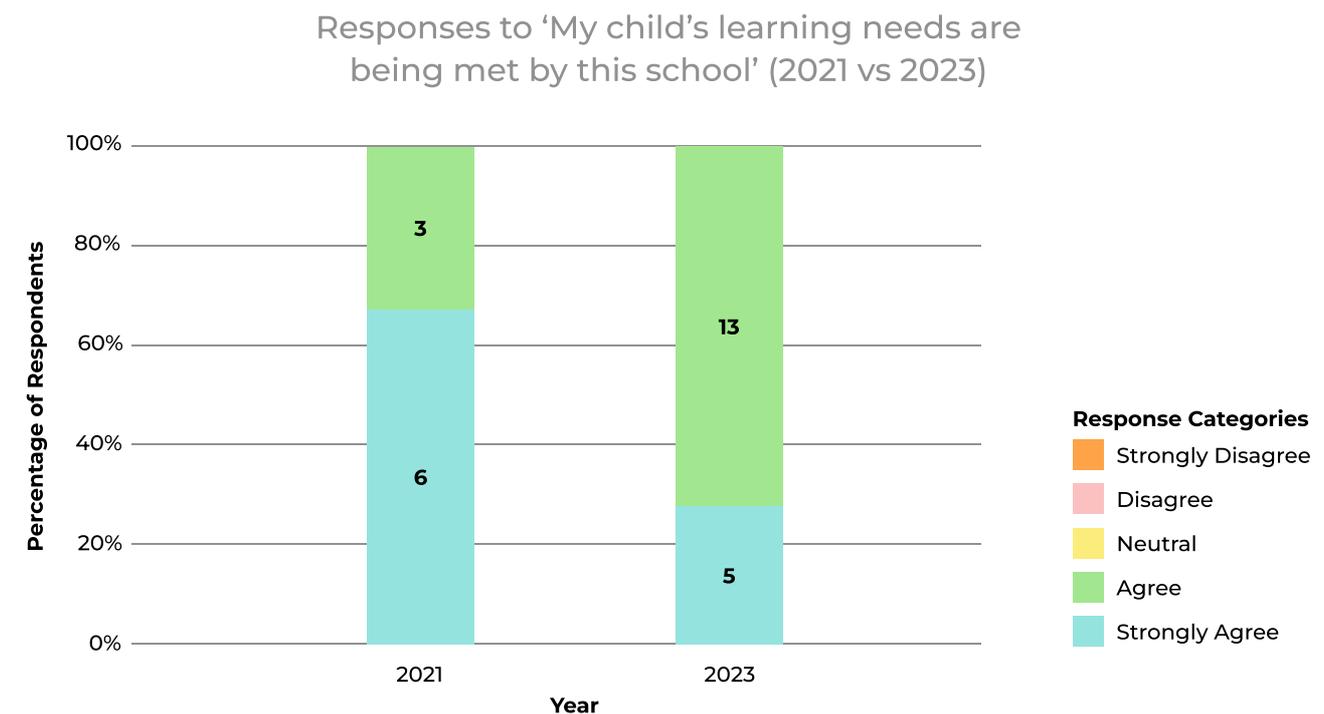
The DECYP **Staff satisfaction survey** showed a decreasing proportion of staff agreement with the statement ‘I would recommend the school to others’ in 2022 and 2023 compared to 2021 (Figure 22). It is possible that high staff turnover may have affected this result.

**Figure 22 Recommend school to others: Staff satisfaction survey**



All families responding to the **Family satisfaction survey** in 2021 and 2023 agreed with the statement that ‘My child’s learning needs are being met by this school’ (Figure 23).

**Figure 23 School meeting learning needs: Family satisfaction survey**



## Feel supported to learn by their caregivers and education providers

While differences were not statistically significant, it is worth noting that agreement that the E24CG teaches new skills which are used at home increased over the three years, up to 91% in 2024 (Figure 1).

There were improvements to the school infrastructure over the life of the evaluation, particularly to the kitchen and Wingani. All staff responding to the staff survey in 2023 and 2024 agreed that school infrastructure was well suited for the program, up for 83% in 2022 (see Figure 1).

Perceptions of adequacy for the E24CG physical infrastructures improved over the course of the evaluation, in line with the renovations and updates implemented. While these improved increasingly, perceptions regarding the adequacy of human resourcing for facilitating learning in the spaces were a different matter. Stakeholder 5 (2024) describes how:

**Not having an adequately resourced lead teacher [is a challenge]...** *this lead teacher becomes the whip for the principal, who can get the "okay, this is how I'm going to support you to enable this program to proceed", and that might be by finding resources. So, it's I suppose the whole thing is not that it doesn't link to curriculum, it's that **you need the leadership** within the school to say 'this is how it links for us'.* (Stakeholder 5, 2024)

**The barriers** for us definitely [are]... *the overall status, [the] state of **staffing and the stability of the school**. So that's influenced [the E24CG] on multiple levels.* (Stakeholder 5, 2024)

The role and impact of human resourcing emerged as a key enabler and inhibitor for students' learning in the E24CG.

*the key thing for us is **the school leadership team**. So that includes the principal, lead teacher, kitchen and garden specialists... **we need to have that team coming together**, they also need to have a well settled and supported teaching staff.* (Stakeholder 5, 2024)

**Leadership is key, absolutely key.** *When principal leadership is changing or uncertain, the whole program becomes uncertain and difficult to deal with. They're sort of the gatekeepers to really supporting the program. They're the ones that give the directive on how the program links and how it's connected and **if they're supportive, then everyone else can be supportive.*** (Stakeholder 5, 2024)

The themes of consistency of support for the E24CG from school leadership and adequate time and resources to integrate and take advantage of the opportunities presented by the E24CG are echoed in the remaining Learning subsections.

## Have their individual learning needs addressed to allow them to realise their learning potential

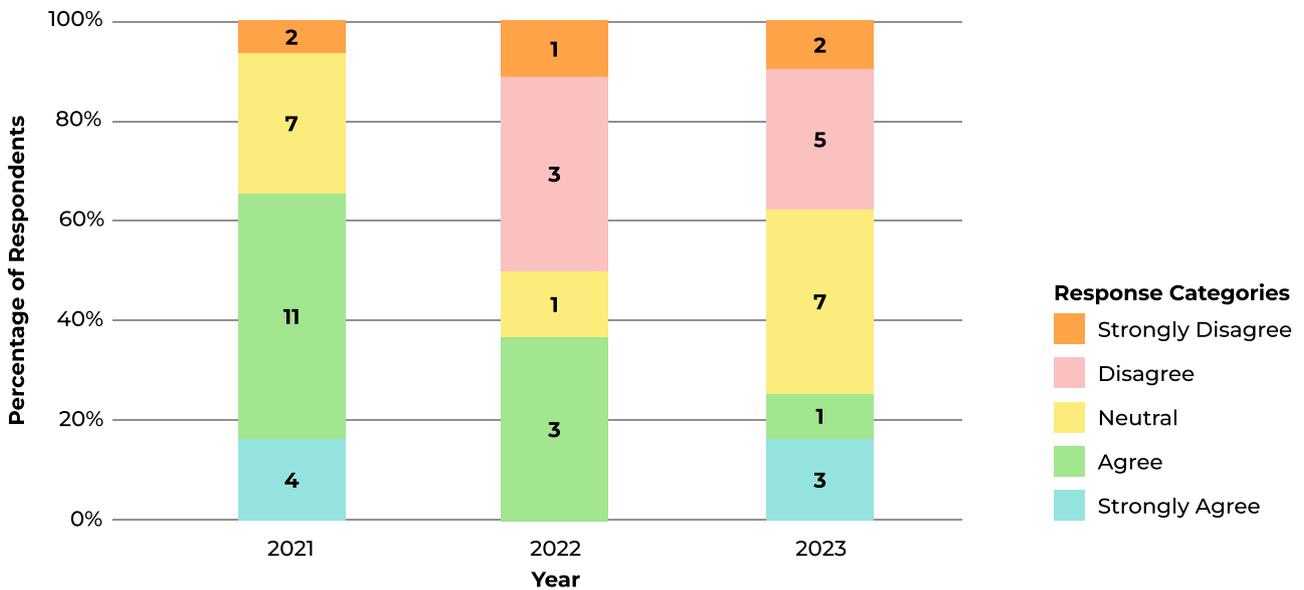
Staff self-reported understanding of the goals of the E24CG was high over the three years, particularly among teachers (Figure 1). Staff perception that students are motivated to learn increased over the three years (39% in 2022 to 91% in 2024) (Figure 1).

The DECYP **Staff satisfaction survey** asked the extent to which staff agreed with the statement 'All students' learning needs are being met at this school'. Figure 24 suggests that staff were more inclined to disagree with the statement in 2022 and 2023 than 2021, but the difference was not statistically significant.



**Figure 24 School meets all student learning needs: Staff satisfaction survey**

Responses to 'I would recommend school to others' (2021 vs 2022 vs 2023)



Staff responses: N=24 (2021), 8 (2022), 18 (2023)

Staff understanding of the goals and purpose of the E24CG is an important enabler and inhibitor for being able to make the most of the opportunities provided by the E24CG spaces and extra resourcing to cater to individual learning needs of students. This is especially so for those students who find it difficult to participate and succeed in traditional classroom environments.

This resonates with research that has found hands-on learning, such as that conducted within kitchen garden programs, facilitates engagement and enhanced learning outcomes among students (DeMink-Carthew & Olofson, 2022). Stakeholder 5 describes this in 2024 as follows:

*the program is **engaging disengaged students by providing alternate learning method methodologies.** Hands-on learning [is] important because it provides an opportunity for [those] students to perform well in that scenario, that might not perform well in that traditional classroom reading, writing and arithmetic. They can show that 'look, I'm fantastic with my life skills', or 'I'm fantastic in the garden', and that boost in confidence for the students... the program has been developed around actively using the Kitchen Garden program to engage those students and **build confidence and create meaningful learning opportunities.***  
(Stakeholder 5, 2024)

*I think with our kids, because the trauma and because of some of the intellectual disabilities, **the way they learn needs it to be a lot simpler.** Staff member 1 has, on their own initiative, realised that and pared it back to the point we're doing much simpler food and we're doing less of it. And I think they're getting the irony, of course, being that **they're getting more out of it.** They [the students] are actually getting **more learning.** We'd go and interview them [the students] afterwards. [sometimes they] couldn't remember things, but now they're retaining it a lot more, which is great.*  
(Teacher A, 2023)

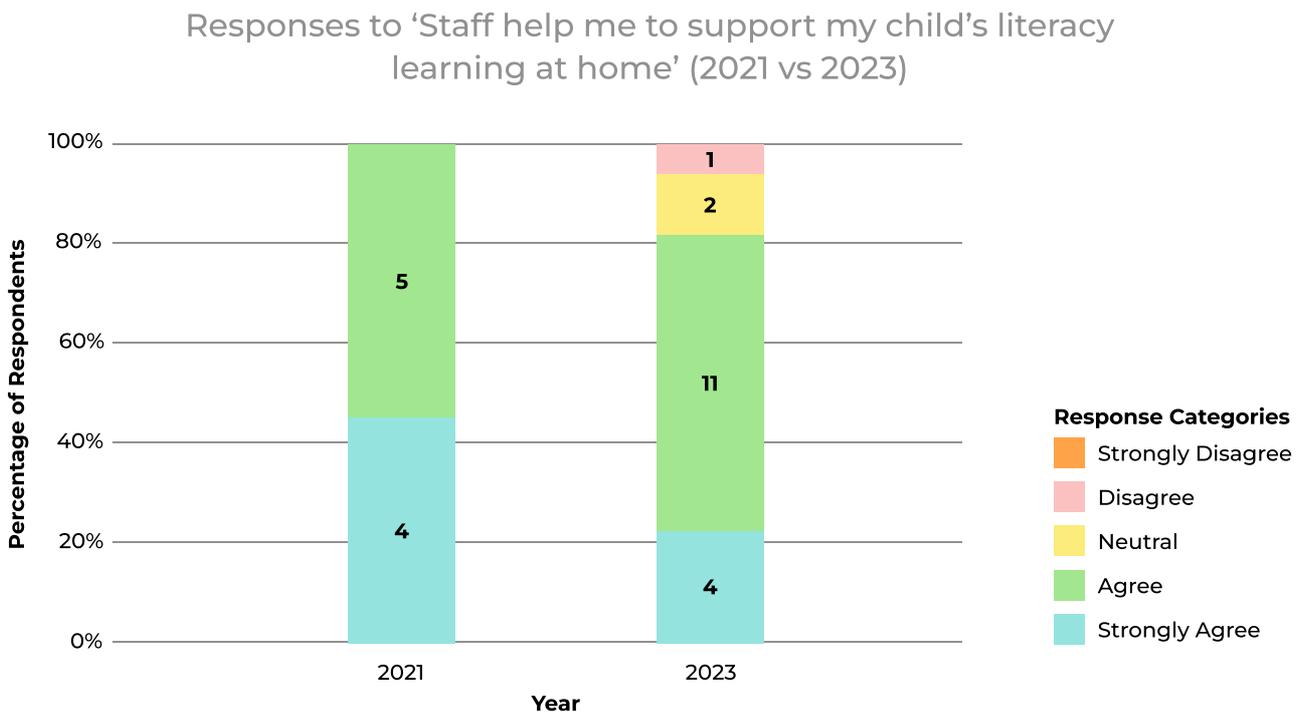
Congruent with findings from Block et al’s (2021) kitchen garden evaluation, children described – by parents/caregivers, teachers and stakeholders - as ‘non-academic’ or exhibiting ‘learning difficulties’ and ‘challenging’ behaviours were experiencing ‘success’ at school via their engagement in the E24CG. For example:

*[my son] really struggles being in a classroom with too many people... I think the smaller groups in the Kitchen Garden [work better]. From what I understand, they split the class into three; one will go into the kitchen, one to the garden, and one to sports or something. So, they're in smaller groups. And I think that really benefits [my son] because he will not engage when he's in a full classroom. He's really struggling and he's not participating in anything.*  
 (Parent/community member 3, 2024)

**Develop communicative literacy and numeracy skills appropriate to their age**

The DECYP **Family and Staff satisfaction surveys** both ask questions about staff supporting families to develop children’s literacy and numeracy. All family respondents in 2021 and most in 2023 agreed with the statement ‘Staff at this school provide ideas to help me support my child’s literacy and numeracy’ (Figure 25). All staff responding in 2022 and most in 2021 and 2023 agreed with the statement that ‘Staff help parents to support my child’s literacy and numeracy’ (Figure 26).

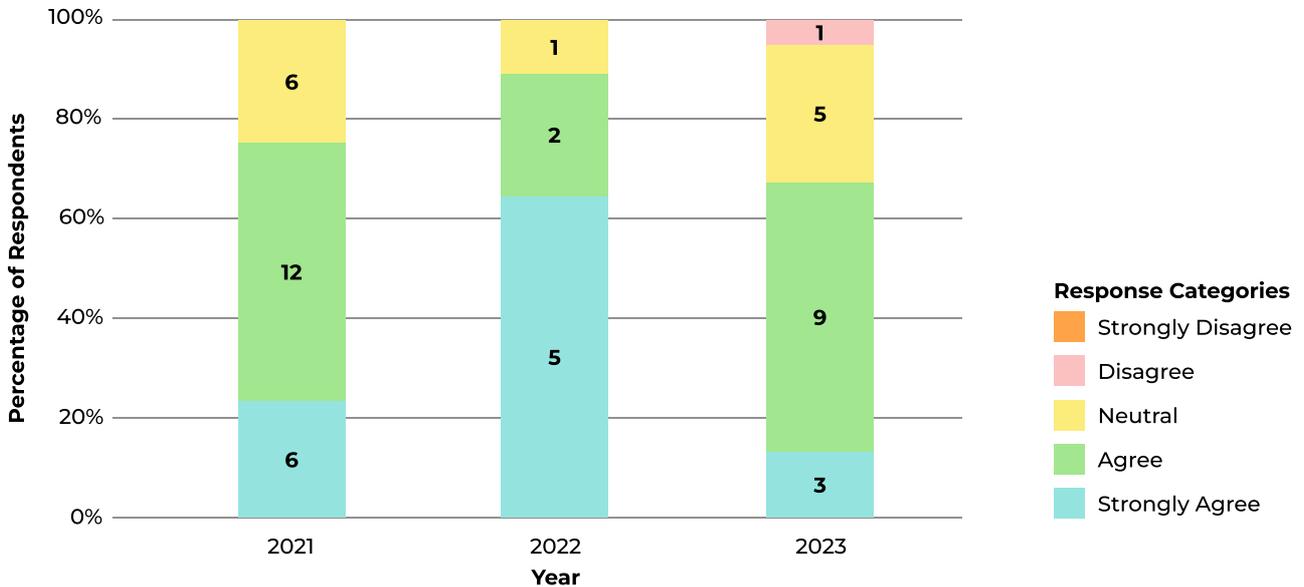
**Figure 25 Staff help parents to support literacy and numeracy: Family satisfaction survey**



Family responses: N=9 (2021), 18 (2023)

**Figure 26 Staff help parents to support literacy and numeracy: Staff satisfaction survey**

Responses to 'Staff help parents to support their child's literacy and numeracy learning' (2021 vs 2022 vs 2023)



Staff responses: N=24 (2021), 8 (2022), 18 (2023)

There were compelling examples of teachers linking activities in the kitchen and the garden with age appropriate and student appropriate literacy and numeracy skill development. These range from kindergarten students practicing oral procedural communication to older students whose were able to communicate about their experiences in kitchen garden journals using a mix and pictures and words.

**In the kitchen you've got both a strong literacy component [and] with oral language, because in kinder a lot of our literacy focuses on oral language and retelling events using different vocabulary, learning new words and being able to describe things and being able to explain and remember... In the kitchen, you've got procedural texts when you're looking at recipes, and they're doing some drawings related to their activity in the kitchen. So ... communicating through their drawings about their experiences in the kitchen. So there's a lot of literacy.**

(Teacher B, 2023)

*It becomes a massively fun activity [creating] a procedural text.. it's authentic... you're not writing something that you don't understand or that something that you've read in a book. It's we did this yesterday and that's that link to their lives.*

(Teacher A, 2023)

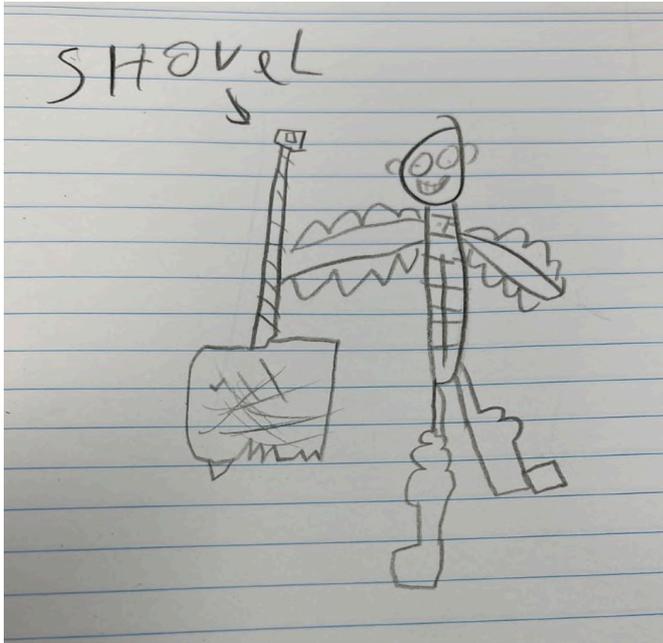
Further to their demonstrated ability to develop expressive and communicative literacies, the students are fostering numeracy in an applied and similarly authentic way. Teacher A explains in 2023 how:

*It's a chance for them to experience certain things in an authentic way. Measurement is sometimes a difficult unit to teach when kids have no concept of measurement. But then when you start using it in, OK, well, we need to measure 2/3 of a jug of milk or we need to measure this much flour by weight or whatever... giving them that chance to maybe realise that this isn't just academic stuff **we're teaching** and there's **a way you can actually use some of these concepts like measurement, in real life.***

(Teacher A, 2023)

*Putting a book in front of students, I was told, can be quite traumatic for a lot of the students at CVPS because reading and writing is a stressful and traumatic experience. **It's been difficult for them,** perhaps this is associated with a sense of embarrassment. But, I found it really striking looking through this student's journal. **There isn't a lot of writing in it. But there are a lot of pictures and a lot of detail in the pictures as well.***

(Observational notes, 2023)

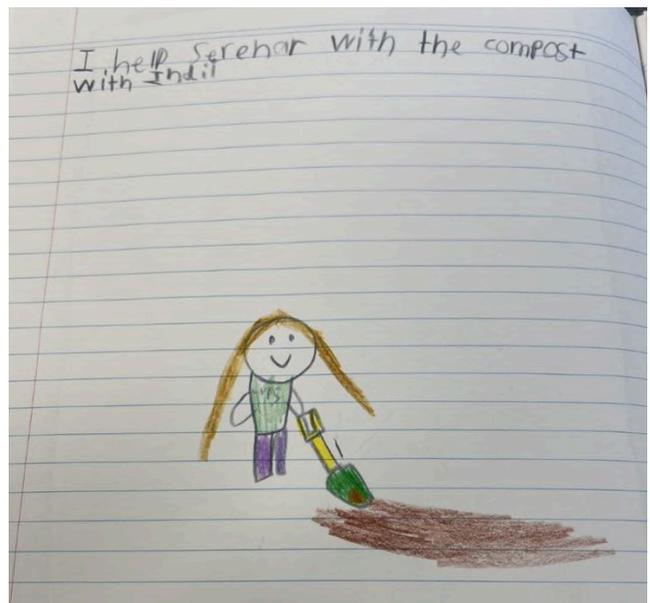


This photo is from a student's journal. They were asked to write about or recall what they had done in that session in the garden. **Rather than writing, they've drawn this incredible picture** of themselves with the shovel working in the garden. They have written the word shovel. (Observational notes, 2023)

### Learn about their world via connections with nature and the outdoors

All staff in each of the three years agreed the E24CG helps the students learn about nature and the environment (see Figure 1). Our qualitative data set reveals a variety of context, circumstances and occasions for where and when this learning occurs.

*[you can] go outside and put your feet on the ground. You can feel the earth. Feel the energy. Feel the environment.*  
(Staff member 10, 2023)



(Images courtesy of evaluation team, CVPS dataset)

Student working in garden with friend 'I help [Staff name] with the compost with Indi'

Within the picture you can see another student, a friend in the class, and they have this nice picture here of her **working out in the garden. They had been planting beans together.** I thought this was nice because it shows that this student was working in a team  
(Observational notes, 2023)

A number of enablers and inhibitors arise for teachers' ability to articulate and activate connections between E24CG activities and curriculum content, capabilities and priorities. Data generated with teachers and students reveal a number of ways in which the E24CG enables students to learn about their world via connections with nature and the outdoors. Teachers are able to identify, connect and activate learning opportunities from the E24CG with activities being undertaken in their classrooms. For example, Teacher B (2023) explains how:

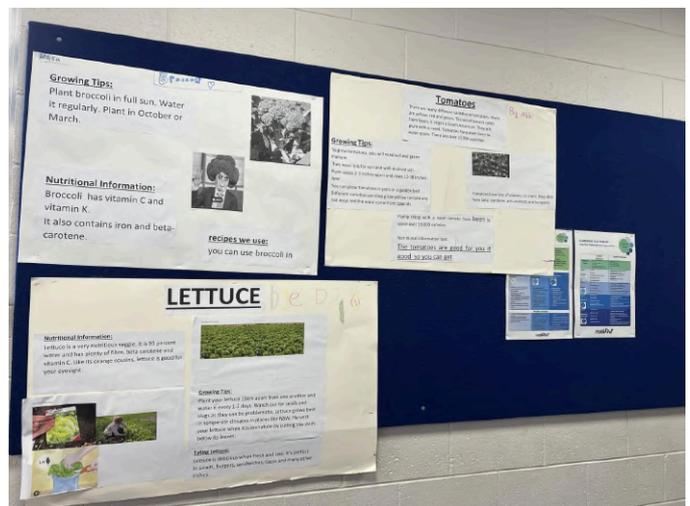
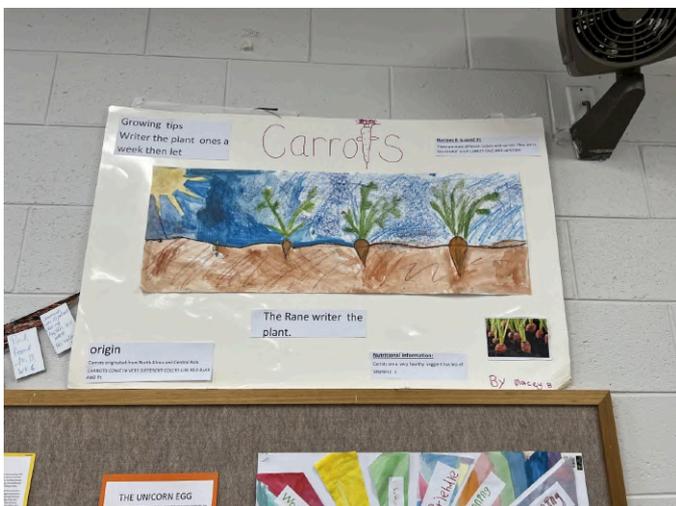
I managed **to link a book in with a seed activity.** Maybe some texts that we work with in Kinder can **relate to the learning that they're doing in the Kitchen Garden program** which would be good. You know when it's possible. I can think of good resources that can add to their experiences.  
(Teacher B, 2023)

Further, Teacher A (2023) describes:

The big project that I'm linking is basically a huge research project where we're going to do information texts instead of procedural [writing]. And they're each going to, or they have already picked a vegetable that they're going to become an expert on - On growing it, on recipes you can create with it, on where it comes from, the conditions it needs, what it tastes like, what type of veggie it is; all those things. So that's an **obvious tie in between our writing in the classroom and what they are doing in the program.**  
(Teacher A, 2023)

Learning artefacts produced by students provide evidence of tangible learning outcomes arising from opportunities taken up to learn about their world via connections with nature and the outdoors. For example:

Here are some posters that were done in the four five class. This project involves students **picking a vegetable and doing research on the vegetable, and then making a poster.** You can see the student illustrating through the cycle of the carrot or lettuce and how they characterise this cycle. You can see **they're also aware of the importance of the sun** in the picture. You can see some research the students have done and their **reporting of discoveries through artwork and text.**  
(Observational notes, 2023)



(Images courtesy of evaluation team, CVPS dataset)



(Photo provided by Rosie Hastie, 2024).

Collectively, these examples highlight how where a supportive and collaborative approach to curriculum contextualisation and enactment is enabled, teachers can feel properly supported and empowered to exercise their agency in the change process (MacDonald et al., 2016).

While it is clear that some teachers are embracing and building on the many opportunities to enhance the alignment between the classroom and the kitchen and garden, there remains room for improvement. Consistency in leadership and providing time and resources for building staff capacity to integrate the opportunities of the E24CG into teaching and learning would improve integration of the E24CG into learning at CVPS. For example, a stakeholder observes:

*Where clear leadership and direction isn't provided, you can have teachers coming out and going and thinking: 'I see the kids are involved. **I can see there's learning opportunities, but I don't know where that is** and I'm so time poor that I'm not getting into that'. **The strategy of the program really needs to be identified and led from the top.*** (Stakeholder 5, 2024)

There are systemic challenges for schools [alongside] challenges for running the program. There's [a need to be] providing adequate time for teachers to be trained in the program. That's quite hard. (Stakeholder 5, 2024)

The imperative of adequate resourcing to support schools and other stakeholders' to fulfil the learning possibilities inherent to his kitchen garden program are consistent with findings reported in further kitchen garden evaluations undertaken across Australia. For example, Yeatman et al. (2014) report how maximising the learning potential of garden and kitchen programs is contingent upon significant and sustained commitment of resourcing across multiple levels— schools, government departments and communities, and does not come easily.

For students to realise the full potential of learning outcomes inherent to the program, all staff must be well-trained and supported to implement the program effectively. It is clear that some teachers are demonstrably able to do this, and there is scope for those teachers experiencing success to be leveraged as a resource.

*It's maybe a question of if some of these **units that we're doing**, other teachers are doing, if it works then there's **no reason why we couldn't share those out with other people**. And if you guys have this in other schools, then just share what we've done.* (Teacher A, 2023)

*If we **put more resources** in and we **pull people and more money [we can do]** so many amazing things. Time into education. Really. That early intervention gives them the creativity to go 'I'm going to take a different path, I've been out of regulate my emotions, I've been out and I'm learning all these skill sets so I can go and do something different'.*

(Staff member 10, 2023)

*I'm not sure if the school's **allocating time for a lead teacher** at the moment, so that would be like the only actual funding that's being provided by the school. So, it's **definitely not adequately funded**. I think that **these programs should receive [further] funding**.*

(Stakeholder 5, 2024)

Collectively, these voices point to the imperative of a properly supported lead teacher to aid less confident or new teachers to articulate and act upon opportunities to better integrate learning opportunities between the E24CG and what they are pursuing in their classrooms.

*I think that those curriculum links could be improved as well. I think teachers are finding it very difficult, of course with all the challenges that they have, to have that headspace to work out where those curriculum links can happen. So, I think it's about working with teachers and supporting teachers to see that the Kitchen Garden program is not an add-on, that it's not an extra, that it's actually something that helps with the curriculum.*

(Staff member 1, 2022)

This points to successful implementation and enactment of curriculum being highly contingent on how curriculum is defined, interpreted and contextualised by educators (MacDonald et al., 2016).

A stakeholder from DECYP external to the school pointed to an alternative Tasmanian curriculum framework related to learning about the world via connections to the natural world and outdoors—that of the food and fibre curriculum with links to school farms and agriculture. The [Tasmanian Agricultural Education Framework](#) (Department for Education, Children and Young People, n.d) is a resource that could be more closely aligned with the E24CG.

*There's a bit of a lack of connection in general with the Tasmanian Agricultural education framework and the food and fibre curriculum. And I can understand why that would happen. That happens because of the key drivers for the kitchen garden programs and the CVPS program. The establishment of the strategy and the toolkit are all driven through health and wellbeing.*

(Stakeholder 6, 2024)

The stakeholder went on to point out the value of broadening learning from a narrower health and wellbeing perspective to include science-based careers and a consumer perspective.

*the parallel universe around **food and fibre production is more careers based and geared towards helping students to understand**. And this is **available to all schools** as well understand how their food and fibre is produced as consumers, future consumers and potential future workforce in that industry parallel universe.*

(Stakeholder 6, 2024)

It is of critical importance to acknowledge the support measures teachers seek to help them overcome the barriers they have identified as impacting upon their ability to bring the learning opportunities of the E24CG into active conversation with curriculum content, capabilities and priorities curriculum.



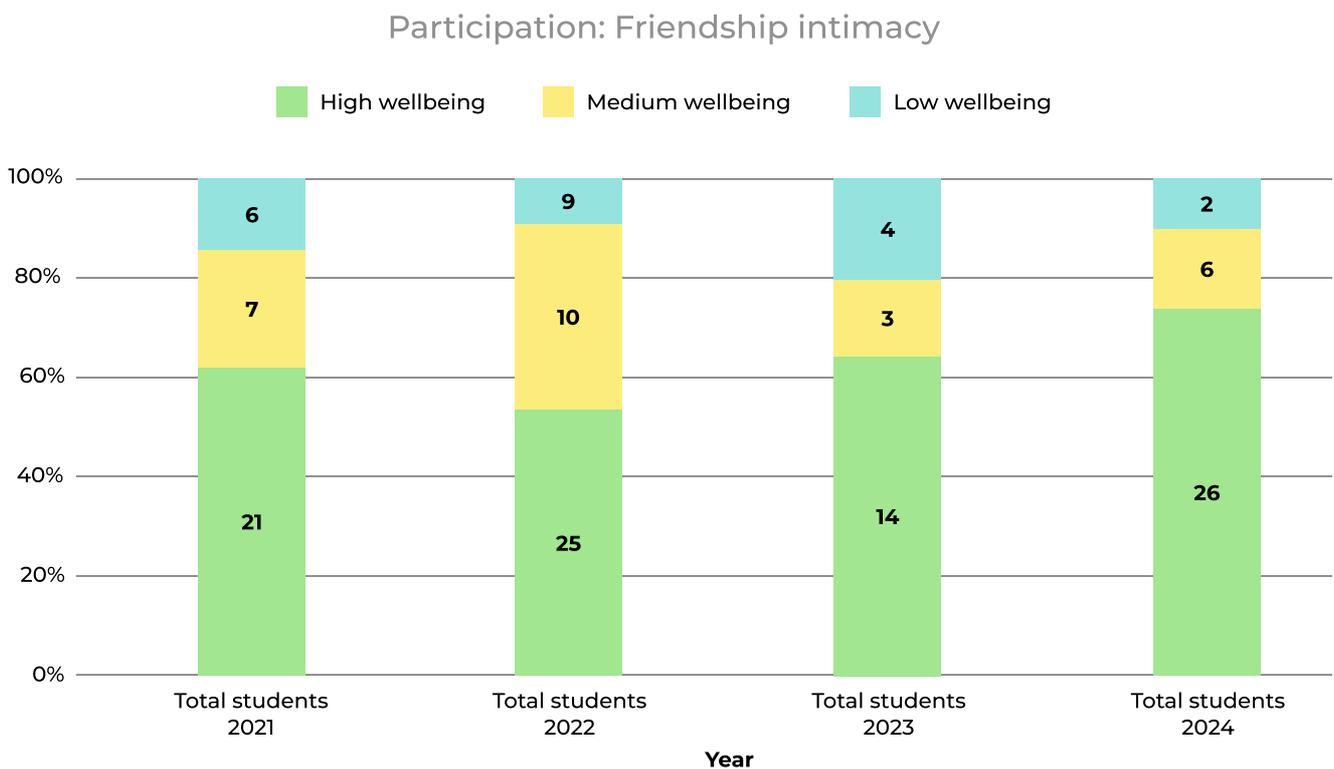
## Participating

In this section, we examine evidence of:

- opportunities to engage with volunteers
- students engaging in learning experiences that enable them to imagine and explore future possibilities
- authentic experiences that can allow students to see how skills developed can be used at home
- how some learning outcomes can inform future thinking for high school and careers.
- a variety of outdoor and indoor learning environments that provide opportunities to participate in learning, engage with others and with life in general.

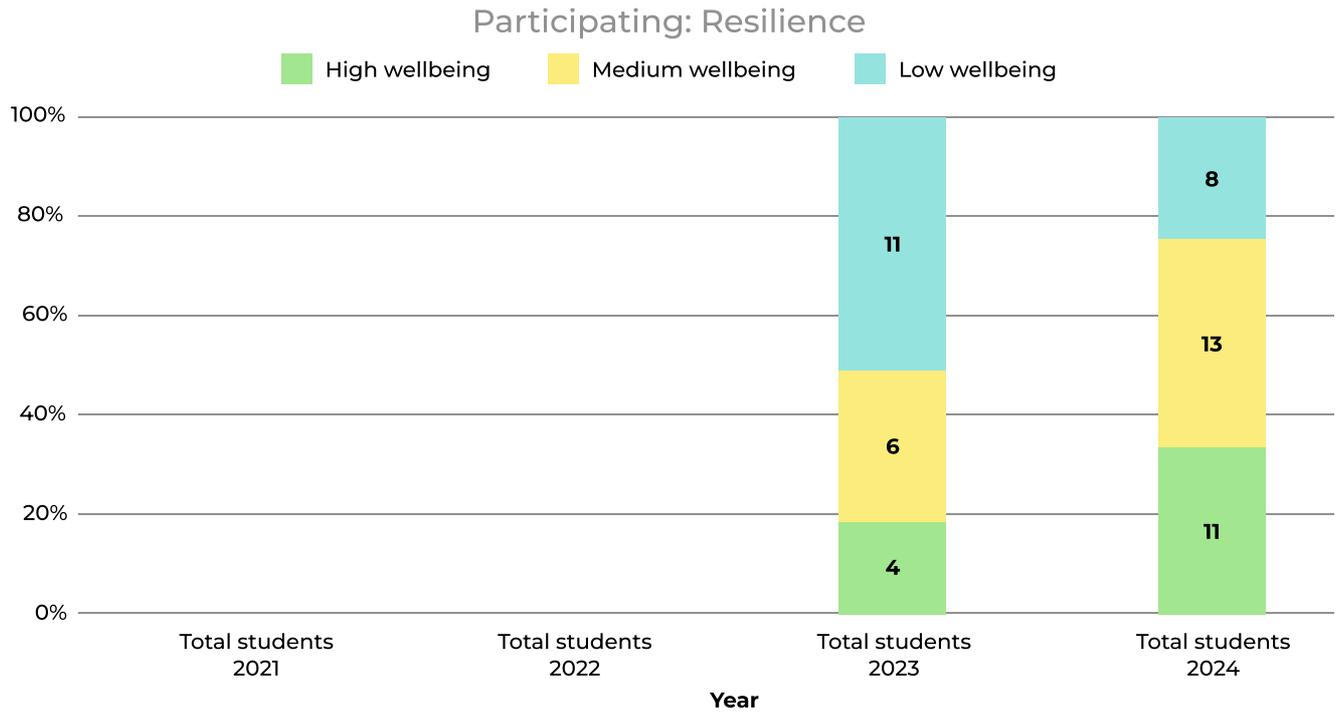
The **Student Wellbeing survey** data showed that wellbeing related to participating improved over the years of the evaluation. Friendship intimacy wellbeing levels were higher in 2024 than 2022 and 2023 (Figure 27). Resilience was only included in the **Student Wellbeing survey** from 2023. Resilience in 2024 significantly improved compared to 2023 (Figure 28).

**Figure 27 Friendship intimacy: Student wellbeing survey**



Friendship intimacy wellbeing levels were statistically significantly higher in 2024 than 2022 and 2023.

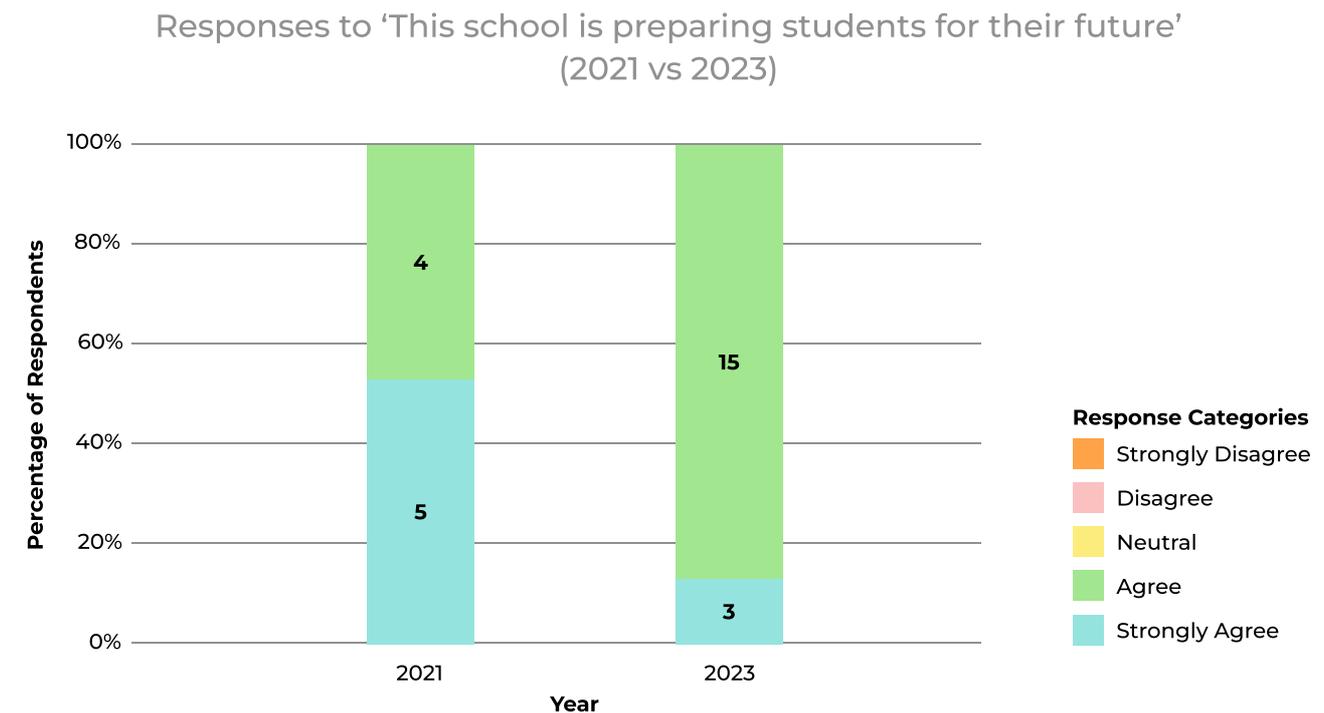
**Figure 28 Resilience Student wellbeing survey**



Resilience wellbeing was statistically higher in 2024 than 2023.

The DECYP **Family satisfaction survey** showed that all families who responded in both 2021 and 2023 agreed with the statement 'This school is preparing students for their future' (Figure 29).

**Figure 29 Preparing students' for the future: Family satisfaction survey**



Family responses: N=9 (2021), 18 (2023)

## Engagement with others and community groups

There was increasing agreement over the three years of the staff survey that the E24CG facilitates greater engagement by the parents in school activities, with 65% of staff respondents agreeing it did so in 2024. (see Figure 1).

*The positive things I've seen at Clarendon Vale, [the program is] unique to that site and it is **conveniently located within the community**. I think that allows for the ecosystem that it finds itself in, with the Child Independent Learning Centre and the Community House and the men's Shed and all those parties are on the same page. It's actually **an ideal scenario for enabling greater community engagement**.*  
(Stakeholder 5, 2024)

Support of caregivers via family engagement with the E24CG helps build three-way trusting relationships between school, students and families, as described in the Loved and safe section above.

*We want to **encourage locals to use that space**. It is a community garden as 3 partners to contribute to the garden, so that's the school, the neighbourhood centre, and the Child Family centre. So, we try and **be a bit of a conduit for those 3 parties to communicate**, to help promote the space to the broader community.*  
(Stakeholder 1, 2022)

While external stakeholders from the Neighbourhood House, Child and Family Centre and community impact program all spoke of examples of engagement with the school, they noted that school staff turnover was a challenge for maintaining effective, productive collaborative relationships.

*Over the years, [changes in staff] has always been a thing... the principal is new... [staff turnover is because] people tend to not even give the school a chance.... it's got a bit of a bad reputation for no reason other than the area.*  
(Community Member 1, 2024)

*We have families too, parents that **come in and volunteer**. Not as many as we'd like to because of COVID and a couple of other things, but **they come in and they participate** in that as well and made the recipes.*

(Staff member 4, 2022)

*The potential of **having more volunteers and working with parents and the community [means] they're also learning these skills**, like if they're in the classes. That's something that we're working on at the moment. That will help with the flow on effect for the whole community with the program.*  
(Staff member 2, 2022)

Unfortunately, the negative impact of COVID on volunteering was still apparent in 2024. Having volunteers with the essential Working with Vulnerable People card was identified as another challenge.

*In the past it has when we had some volunteers that would help in the Kitchen Garden program, I think that was amazing. And **unfortunately, with COVID, we've kind of lost a lot of that engagement**.*  
(Staff member 1, 2022)

*We see across all schools and all demographics that **it's hard to get volunteers hard to get parents into the schools [with] COVID drag**, which got rid of a lot of those sort of parent involvement in schools and **it never really bounced back to what it was**.*  
(Stakeholder 4, 2024)

Further to COVID, some participants perceive and describe further organisational factors that inhibit communication between stakeholders. For example:

***The challenge** that I have is the **[lack of] communication between the people involved [in the program]** at the beginning of the year. We had a bit of discussion about the potential to **organise our sessions** in a way that I could **be more involved** in what's actually happening in the garden and the kitchen, and that's going to be an **ongoing discussion to see whether that's actually possible**, because I find it hard to be involved when I'm not there.*  
(Staff member 1, 2022)

Events such as the Winter Feast offer opportunities for community members and parents to engage with each other in a safe space. This engagement is multileveled, as community members can engage with each other, with students and with school staff. The following are excerpts from observational notes taken at the Winter Feast:

*I see children approaching tables to say hi to their seated friends who are already eating with family. **The parents of the seated children are very interested in their child's friends;** they ask how they are and whether they have family coming to join the feast. The child who approached the table quietly say their family weren't able to come (I could hear what sounded like a bit of disappointment in their voice), and the parent says 'that's ok – I know they definitely would have if they could', and **they quickly ask the friend to go and get their soup and come and sit with them.** This child doesn't hesitate in running to grab their bowl and joins their friend and their family to eat together. Lots of **smiles and laughter ensue as they sit, eat and chat together.***  
(Observational notes, 2024)

### Actively participate in their own life

This section considers evidence of participating in life enabled through the E24CG, both while at CVPS and into high school and beyond.

*The children sit **together around the table with their family members** and proceed to eat together. There is much laughter and enjoyment. I hear **parents asking their children what ingredients are in the soup**, who was involved with making the soup. I hear children describing the main ingredient, pumpkin, and how these were grown in the garden and are in the soup they are eating.*  
(Observational notes, 2024)

*In addition to that educational content and aspect, we want to be ensuring that we're providing lifelong learning experiences. So that builds into life skills in gardening and in cooking that students can take forward into their own lives.*  
(Stakeholder 5, 2024)

*It's that flow on effect. **The kids are learning this, then they're going home and talking to their parents about it.** It will only improve the more years that the program is going on, because all of a sudden, kids that have been going through the program, they're going to be having their own kids. Hopefully **that flow on effect from having the program will definitely help.***  
(Staff member 2, 2022)

When asked if the kitchen and garden is or can be an effective tool to help students transition from primary school into further education, a Bayview Secondary College staff member agreed.

*Yeah, absolutely. So particularly if there is a corresponding garden in the high school.*  
(Bayview Secondary College staff member, 2024)

*From our point of view, **it is a really good transition to our (high school) garden...** In the last couple of years it's really noticeable that we have CVPS students who have come across from the Kitchen Garden program and **we already have that familiar area** which is the **garden** for them to engage in... the big thing with transition is it's about gaining familiarity. If you can take out some of the unknowns, the transition **goes a lot more smoothly.***  
(Bayview Secondary College staff member, 2024)

In our two grade 7 focus group conversations at Bay View College (conducted in Term 2, 2024), students expressed frustration and disappointment at what they perceive as a disconnect between their grade 6 CVPS E24CG experience and what they were able to access in the high school setting.

In terms of actively participating in their own life, the Bay View focus groups spoke positively and negatively about their participatory experiences in the E24CG.

*It was fun. It was a good experience*  
(Bayview Secondary College Focus Group 1, speaker 2)

In contrast to this, the students spoke of some participatory aspects that they did not enjoy:

*I got sick of **making the same thing** over and over again*  
(Bayview Secondary College Focus Group 1, speaker 3)

Irrespective of positive and negative perceptions, both Focus Groups indicated wanting increased opportunity to be involved in kitchen and garden activities.

From our interviews with the Bayview Secondary College Transition coordinator, we understand that opportunities for students to participate in kitchen and garden activities at Bayview [Secondary College] increase post grade seven, and increasingly focus on developing students' skills and capacities to enter the workforce. For example:

*We're building fences; structures that actually have like a **functional industry purpose**. You have to be able to check you have that responsibility of checking the pH balances of the soils and all those other bits and pieces.*  
(Bayview Secondary College Transition Coordinator, 2024).

We observe this builds well upon gains made in the primary school setting at CVPS:

*When they're in the garden, **they get an incredible sense of achievement** that at the end of the day or end of the lesson that they've got a physical thing that they can see, that they've planted. A plant or they've, built a fence. Or in the kitchen, they've made a muffin. They get an incredible sense of achievement in activities.*  
(Staff member 1, 2022)

Both focus groups were ambiguous and inconclusive as to whether their primary school E24CG experience had any bearing on what professional pathways they might pursue at this time.

The **staff evaluation survey** showed that perceptions that the E24CG helps students decide what to do after they leave school increased over time (22% in 2022, 78% in 2024) (Figure 1). While staff survey responses over the three years of the evaluation indicate a perception that the E24CG helped students consider what they might do post compulsory schooling, it is too soon to know how the E24CG experiences at CVPS have impacted what students elect to do.

*I **haven't had kids** necessarily come up to me and say **'I'm going to be a chef'** or anything like that. But I think those **early experiences are still really valuable** for planting that future seed if you know what I mean.*  
(Teacher A, 2023)

Teacher A (above) and Staff member 1 (below) point to their alighting possible professional pathways from the students' interests and curiosities expressed in the kitchen and the garden.

*Another challenge is those pathways that I talked about is really ensuring that **if students identify as having specific skills in an area, we can support them throughout their journey in school**. So, for example, if a student shows a real love in horticulture, but then can go to Bayview [Secondary] College and **be supported to continue in the Kitchen Garden program** with the view to then going to do like a Cert II in horticulture or something like that.*  
(Staff member 1, 2022)

A DECYP Stakeholder external to the school explained that there is an existing DECYP framework that connects learning around food to students' worlds as consumers and in potential careers. The Tasmanian Agricultural Education (Department for Education, Children and Young People, n.d). framework links food primarily through science rather than health and wellbeing, but as the Stakeholder explains, it is possible to connect the two approaches.

*That happens because of the key drivers for the kitchen garden programs and the CVPS program, the establishment of the strategy and the toolkit are all driven through health and wellbeing... And it's entirely relevant. And sometimes we have tried, and we do our best to **draw the connections between that health and wellbeing world, and this career understanding pathway, consumer pathway**.*  
(Stakeholder 6, 2024)

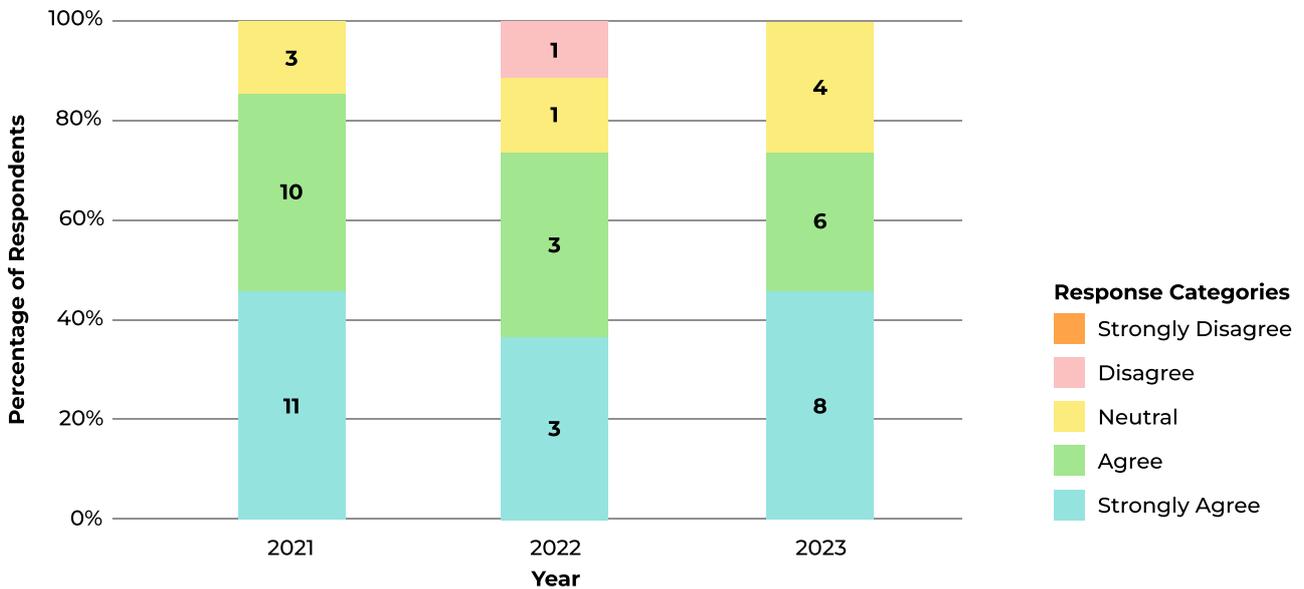
It would be very interesting to follow this group up again in 2027 (grade 10) to see how their E24CG experiences have impacted upon their selection of subject electives and post school professional pathways, particularly as this cohort heads into grades 11 and 12.

### Having their opinion heard and valued

The DECYP Staff satisfaction survey shows that most staff across the three years from 2021 to 2023 agree that People from diverse backgrounds are respected at CVPS.

**Figure 30 People from diverse backgrounds are respected at CVPS: Staff satisfaction survey**

Responses to ‘People from diverse backgrounds are respected at this school’ (2021 vs 2022 vs 2023)



Staff responses: N=24 (2021), 8 (2022), 18 (2023)

Data gathered from across the participant groups indicate a perception that activities undertaken within the garden and kitchen provide students with the opportunity to have their voice heard and valued.

*A [student] found some stuff in the garden. He actually got quite into it, to the point where **he took what he found back to his class** and then did a little ad hoc presentation in front of his classmates. His teacher mentioned **this was not normal behaviour for him**; he wasn't normally that way inclined. But clearly, **something had piqued his imagination or his interest to the point where he felt that was a good thing to share.***  
(Staff member 7, 2022)

Teacher B (2023) corroborates how students are encouraged to share outcomes of their learning experiences in the kitchen and garden:

*After the groups come back, we do try **for them to share with the rest of the class what they did** and you know, share the food they've made. And then we taste it and talk about it. **They let us know what they had to do** and what the ingredients were, and that sort of thing, where they might **bring something back from the garden to show up us.** So yeah, we do attempt to do that.*  
(Teacher B, 2023)

Students come to expect to have their opinion heard and valued, particularly through student leadership positions, such as environmental and cooking leaders in grade six at CVPS. They were disappointed not to be able to find a role where they could continue this in grade seven.

*Bayview Secondary College does not have environmental leaders or an equivalent for younger grades [grade seven]. Students were frustrated and annoyed by this. It appears they have limited opportunities (in grade 7 at Bayview Secondary College) to spend time in the kitchen, with this alternating each term. Students are excited to be in the kitchen and would like to spend more time in the kitchen.*  
(Observational notes, 2024)

*We don't have options in grade seven. We will get to go into the kitchen next term (term four), but we get to choose our options next year (in grade eight).*  
(Bayview Secondary College Focus Group 2, speakers 2, 3 and 4)

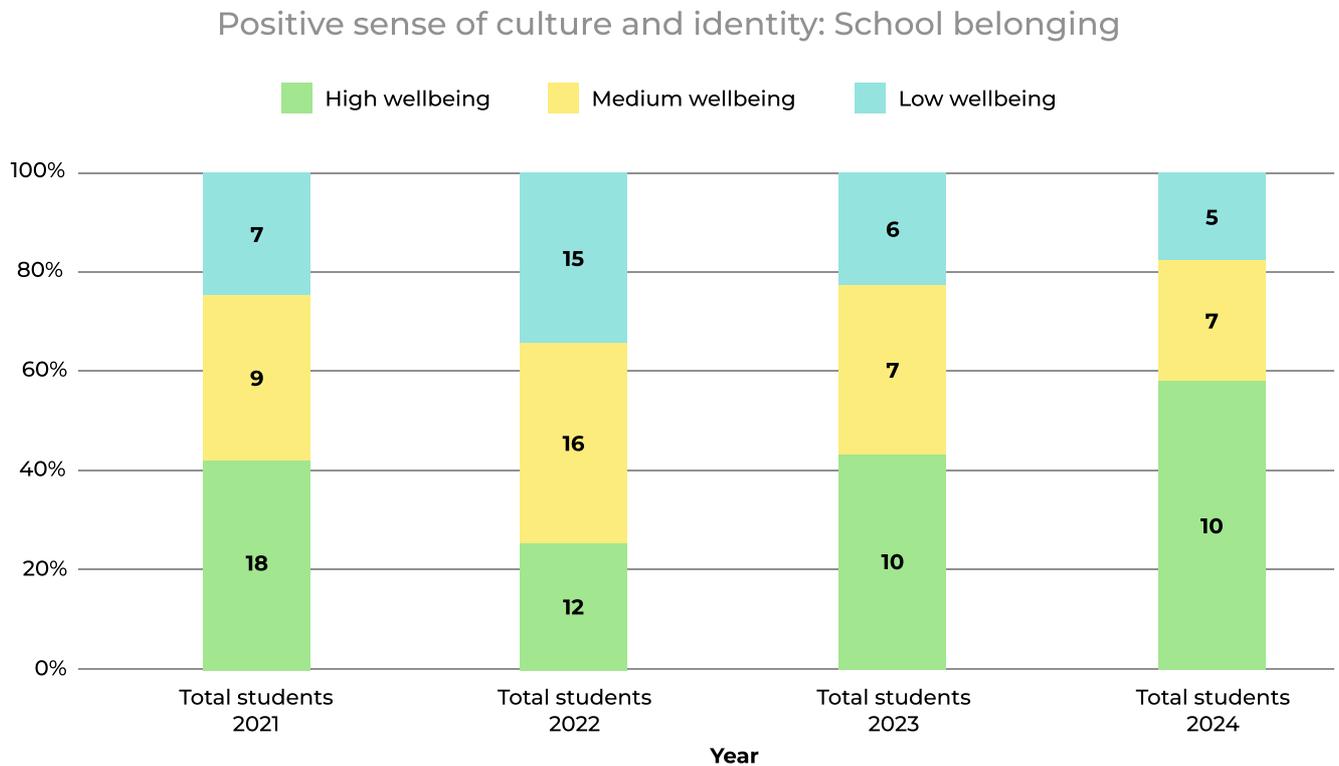
## Having a positive sense of culture and identity

In this context, we explore evidence of:

- multiple opportunities to build self-identity and self-esteem
- many opportunities to take responsibility in a supportive environment
- opportunities for parents and families to show their children they value the school and the children’s achievements there
- opportunities to connect to nature and incorporate environmental values into their culture and identity.

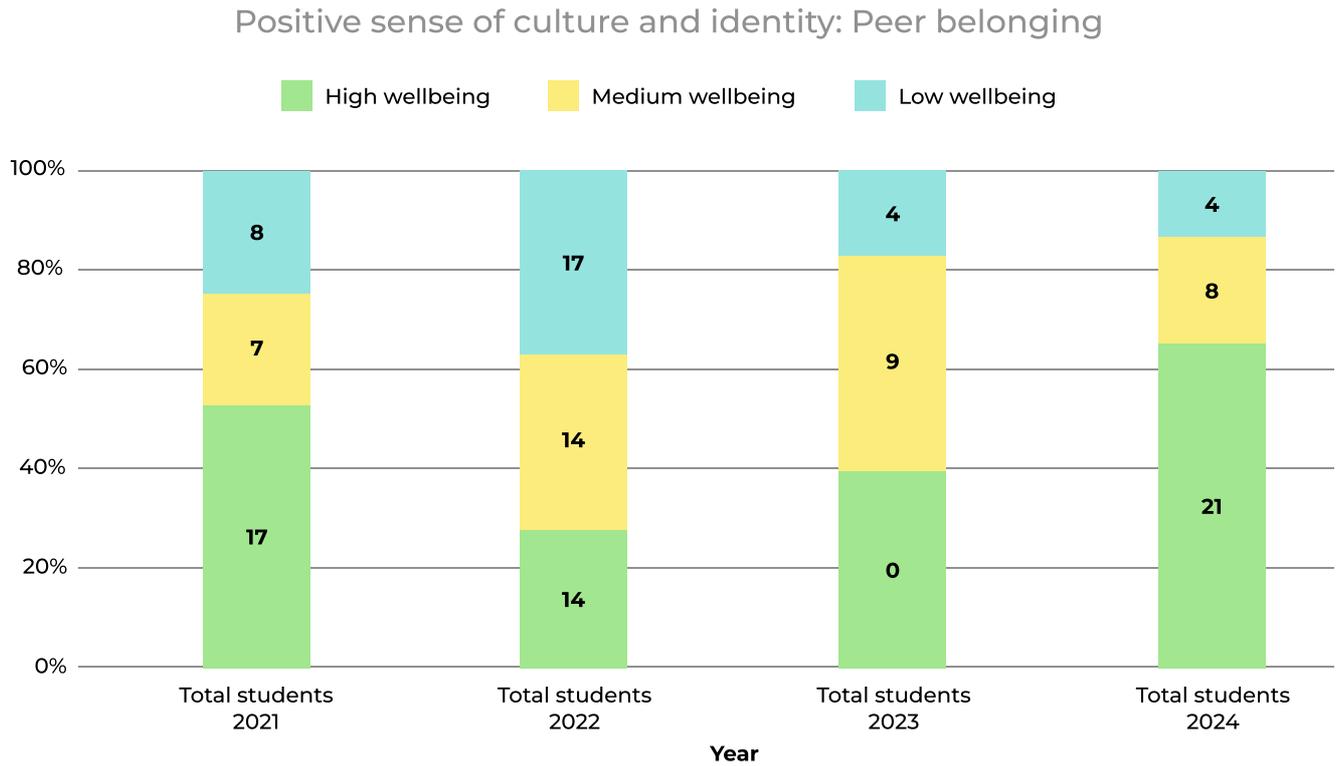
The **Student wellbeing survey** included questions about school belonging and peer belonging. The only significant difference among the four years is school belonging in 2024 was higher than in 2022. Peer belonging was higher in 2024 than 2021 and 2022.

**Figure 31 School belonging Student wellbeing survey**



School belonging wellbeing was statistically significantly higher in 2024 than 2022.

Figure 32 Peer belonging Student wellbeing survey



Peer belonging wellbeing was higher in 2024 than 2021 and 2022.

### Positive sense of self-identity and self-esteem

A staff member noted that the garden builds a shared sense of identity between school and community.

*[The community] see what we're doing, and I think that's exciting. The community garden is right next to our garden, so the kids get to see the community involved and vice versa. That in itself is a really good step, and I think we're putting important back onto the environment. **They're growing things themselves**, they're not just going to the shop and food, they're actually understanding that we can survive off the land if we put effort in. So, the community hears and sees a lot, and I think that's really positive and it brings out really wholesome vibes and energy with everyone.*  
(Staff member 10, 2023)

There were many examples in the qualitative data about E24CG activities building confidence, independence and agency. These create a foundation from which a positive sense of self-identity and self-esteem can thrive.

*I observed a student having a one-to-one session with a staff member making cupcakes. I'm told the student really struggles with school and attending school. And my understanding is that they have a lot of time with alternative learning staff and teacher aides. This student **made these cupcakes themselves** with limited help from a staff member. And this particular bright blue colour **is of their own making**. They cut up the cupcakes and put icing on them. They took these around to their class and **shared them with a classmate and some other staff members**.*  
(Observational notes, 2023)

***There's so much more meaning** I think for them [students]... **they are really excited to learn** how to cook because they can show their mum and dad and that **builds relationships at home**. And that's really exciting for them. I think **that does great things for them**.*  
(Staff member 10, 2023)

The E24CG allows staff to customise many activities for individual students, and they (the students) in turn are encouraged to share their learnings and achievements at school and at home, getting positive reinforcement. There is a sense too that parents' self-esteem and sense of confidence benefits from these initiatives. For example:

*The biggest thing they found when they had parents working in the kitchen was **how transformative** [the Love in the Lunchbox Program] was for them. **It was this massive success for them and a massive boost for their confidence.** Which was amazing, especially if you think about this sort of community context and some people may be coming from being marginalised and not having access to jobs and training and stuff.*  
(Teacher A, 2023)

One staff member interviewee spoke about how parents and students alike were able to reimagine the purpose of school, and how the skills developed in the E24CG augmented what they perceived to be more traditional classroom-based learning.

***It's changed their understanding of the purpose of school.** And hopefully when they go out in the community, they can share that with the rest of the community. And it's just as important, like learning the skills that they're learning in Kitchen Garden, as those they're learning in the classroom.*  
(Staff member 3, 2022)

***It [the program] gives them the confidence and confidence is key.** You can do anything with confidence, if they believe they can, they will... Those are skills that are **encouraging them to believe in themselves** and to get a skill set to further their career... Early intervention and this program is so important.*  
(Staff member 10, 2023)

While there is a clear sense for some participants that the experiences and learning within the kitchen and garden help them reimagine the purpose and possibilities of school, this sense is not universally held to the same extent across participant cohorts. For example, a teacher interviewee was less convinced of the extent to which engagement in the E24CG transformed parents' perceptions of school, their relationship with school and themselves:

***If it affects how they perceive school. I don't know,** to be honest, I've never really had that feedback from parents or had that raised to be honest, yeah.*  
(Teacher A, 2023)

One stakeholder pointed to increased community interest and enthusiasm for the E24CG. For example:

***There's been an increase** in those locals coming into the space and feeling comfortable. And, you know, starting to learn what they can put in and how they can forage from that. **There's been a renewed interest by the neighbourhood centre** to pick excess produce and to get it out into the community. A pantry community.*  
(Stakeholder 1, 2023)

Further, we observed:

*Before Staff member 10 had an alternative learning session with a student... the plot was basically empty, it was just concrete, with the frame in there. And the student actually got the shovel and filled it up with sand and flattened it all down. And then went and laid the grass over it. So this is **a really good example** of how, if you put time and effort into a space, **it can go from something quite plain and ugly into something very welcoming.** And the students get the opportunity to work in this space and they can create something that will be quite beautiful.*  
(Observation notes, 2023)

While staff perception that students at the school have a high level of care for one another increased over the three years, it rose only to 65% in 2024, and the change over time was not statistically significant (Figure 1).

*So, it's really a caring ethos that sort of flows through those aspects. And I suppose that's what social etiquette is based upon – it's care.*  
(Stakeholder 5, 2024)

We surmise that acting upon curiosity and interest as a precursor for building self-esteem, is built slowly through discrete activities and scaffolded opportunities for parents and the wider community to engage in and with E24CG initiatives.

## Having a sense of responsibility, resilience and respect

The E24CG provides many different opportunities for students to take responsibility, ranging from the cooking and environmental leaders to rosters of tasks for younger students. As these staff members explain:

**Cooking leaders will come around, they have a roster.** *They'll come around every morning and they will fill the trolley up. **They will deliver fruit and make a bowl for the whole school...** Grade 6 volunteers, **they'll serve the whole Prep/1 classes...** And you also hear Grade 5's say 'I can't wait for Grade 6 to help you'.*  
(Staff member 5, 2022)

**Each class has a different task in the in the day,** and students swap over from the kitchen to the garden in their time each week, and so **they do take responsibility.** *They learn about how to cook, they learn about how to plant plants in the garden, to weed, **to take responsibility for what happens in the garden and the kitchen***  
(Staff member 4, 2022)

*When they [students] have jobs in the garden, **they have responsibilities. This does amazing things for their confidence.** Amazing things for their personality. That's kind of my role, just encouraging them to do whatever they want to do in the garden.*  
(Staff member 10, 2023)

While instances of vandalism in the kitchen and garden are broadly perceived as having reduced over the past three years, it does still occur occasionally. Interviewees point to the significant learning opportunities and challenges these occasions present, particularly in respect to students' resilience and response.

*This year someone took every single thing from the garden over there (at CVPS). **They took everything so we didn't have anything to use for food and cooking. Every single thing. It annoyed us because we couldn't really do garden.***  
(Focus Group with Grade 7 Bayview students, 2024)

*Up until just recently **there's been minimal vandalism.** So, **there is a sense of ownership.** It's not locked up and vandalism is low.*  
(Stakeholder 1, 2023)

## Being supported to identify their core values about the environment as part of their culture and identity

The garden presents diverse opportunities to participate in and contribute to culture through its inherent learning opportunities, as this stakeholder points out:

*[we do] environmental practices like composting, planting and native plants for habitat planting. [learning about] Bush foods; there's another cultural learning opportunity. **They're really fantastic avenues for creating an environmental ethic and I feel like that's really important ...connecting with nature through gardening and noting that the garden provides space for food production and biodiversity as well.***  
(Stakeholder 5, 2024)

Participating in culture and contributing to cultural change is a collaborative process between the child, their family, and their broader community. Dyment and Reid (2005) describe programs that successfully enable this as those that can bring forth a holistic and integrative, democratic and creative vision of education, that enables connection making within the wholeness of living and learning environments.

*it's [the program] encouraging students and they're obviously grateful because **it's a step in the right direction for them and helping them to do that themselves.** It's a program **for both the parents and the students,** and I think from whatever benefit the kids get, the parents also get because **it's a circle of feedback.***  
(Staff member 10, 2023)

*The **sense of community care** as everyone watches out for and ensures the children have food and fun is **clearly a priority for everyone.***  
(Observational notes, 2024)

While there is clear potential for this to occur within the E24CG, it is subject to factors that work to enable and inhibit its full potential, as highlighted by Stakeholder 5 in several earlier quotes. This is important, as it suggests that sustained efforts and investments made in educating a small number of stakeholders could impact many over time, provided adequate support is in place.

*We have a lot of schools that are self-funded, usually these are schools that are over 180 [students] that **have a larger school resource package** and they're able to say "yeah, we can **provide the funding for the kitchen and garden specialist roles**", and **if they value the program, they'll continue to do that.***

(Stakeholder 5, 2024)

However, a program's capacity to enable cultural dimensions of learning and in turn for these to give rise to wider cultural shifts are contextually contingent. Success requires significant time and sustained resources (Nash et al., 2024). It also demands collective effort and collaboration among stakeholders to support individuals and communities.



## Aim 2) How does the CVPS E24CG contribute to achieving its overarching vision?

***This program is crucial to our school. It encourages engagement and health for all. The program has provided students with healthy and nutritious lunches, a lot of my students rely on the breakfast program to have food in the morning, given Maslow's hierarchy of needs, this is incredibly important.***

(Anonymous staff comment, Staff Survey, 2024)

However, in the words of a staff member in 2022, it needs funding to be sustainable:

*There's many, many challenges. One of those is sustainability... ensuring sustainability. At the moment, we're very lucky to have a program that's funded from 2020 to 2023, which is exciting. I suppose it's around then, **how do we move forward to ensure the sustainability of the program?** So that's a challenge that we need to work on and in order to do that, I think it's really important to keep the engagement happening with the community, with parents, with different stakeholders.*

(Staff member 1, 2022)

All surveyed staff agreed in 2023 and 2024 that the school had appropriate infrastructure for the E24CG. This is a crucial foundation for the program's ability to contribute to its four-point vision of:

- improving healthy food access
- improving learning outcomes
- supporting greater community engagement in the program
- developing links with high schools and career pathways.

The additional staff kitchen and garden specialist positions funded by the program assisted the school to use this infrastructure in all four areas, but particularly the first three.

## Improving healthy food access

The **staff evaluation survey** results presented in Figure 1 provide showed all 2023 and 2024 surveyed staff, and most in 2022 agreed the E24CG:

encouraged students to eat healthy food

helped students be healthy and active.

The increased provision of breakfasts and lunches made over the time of the evaluation gave more frequent access to healthy food. Qualitative data showed that opportunities to try new food, and to take ownership of food they helped to grow and cook, increased student willingness to try and to eat healthy food.

*I think the Kitchen Garden Program gives students lots of new opportunities to taste new foods that they might not have tasted. And to learn about growing food. The links between how to be healthy, how they can be healthy and what that actually means in a more practical, applied sense, rather than just a classroom discussion.*

(Teacher A, 2023)

*Diversifying and increasing the dietary uptake of healthy foods, I think is really key because if you look at the common food practices in the community to use highly processed foods, **this is the only good meal those kids are having most days and the difference that will make over the life of those children is huge.***

(Stakeholder 5, 2024)

The E24CG initiatives enabling all students to have access to a healthy breakfast and lunch every day, recipes provided to families, and freely available surplus produce being shared via the community food cart all contributed to improved access to healthy food, and its consumption.

## Improving learning outcomes

The **staff evaluation survey** results in Figure 1 showed all 2023 and 2024 surveyed staff, and most in 2022 agreeing the E24CG:

*helped with academic outcomes of learning new things and learning about nature and the environment.*

Being at school to learn is a key influence on student learning outcomes. Figure 3 showed a consistent pattern of higher average attendance over 2021-2024 on the days when E24CG activities took place.

The evaluation reveals that investment of funding into upgrading of E24CG infrastructure and facilities yielded excellent opportunities for staff members to maximise E24CG learning opportunities for students, which aligns with the strong sense of agreement we see across the **staff evaluation survey** findings.

While hard data on learning outcomes such as 2024 NAPLAN and PAT results were not available at time of writing, the evaluation has unearthed rich examples of the diverse ways in which the E24CG is enabling strong improvements across learning outcomes for students, particularly in their development and demonstration of communicative literacies, reading, generation and comprehension of (multi-modal) texts, and their sense of wellbeing. These gains are reflected in the quantity and quality of evidence presented for discussion in Aim 1 (Learning) and statements such as the following.

***we're writing** in our books and talking about what we've done; so, communicating and developing those **literacy skills**. They're learning new words and vocabulary.*  
(Staff member 10, 2023)

Again, the physical and spatial infrastructure provided by the KPG contributed to improving learning outcomes.

*Having a diversity of spaces... The kitchen, garden and Wingani Sensory Garden each provide students with different opportunities to learn and foster wellbeing.*  
(Observational notes, 2024)

*When it comes to getting involved and physically working that it engages them so much better, and **being in the garden** and watering the garden, or seeding or weeding and stuff like that, it **really engages them** because **they're not just seeing it, they're doing it**.*  
(Staff member 10, 2023)

The additional kitchen and garden specialist staff members funded by the E24CG also contributed to improving learning outcomes, particularly the individual sessions with kitchen and garden sessions for the Alternative Learning Group students, but also through a diversity of activities they facilitated for mainstream classes as discussed in the subsection Have their individual learning needs addressed to allow them to realise their learning potential above.

Staff turnover, particularly of school leadership and teachers, hindered teachers' capacity to incorporate E24CG activities into the curriculum and make the most of the opportunities afforded by the program to improve learning outcomes.

*That's a gap there in understanding how the program links to curriculum, or links to student learning or student wellbeing, so [we need] that oversight coming from the top of the program. If you don't have the vision coming from the top of the school, and the school principal saying 'this is a program we're participating in, this is where it links to us in learning and curriculum, This is where it links for student health and wellbeing', then it's hard for the teachers to know what they're engaging with.*  
(Stakeholder 5, 2024)

There is evidence that curriculum connections are improving, but professional development and sharing mechanisms for lesson plans and classroom ready resources within the school and with other schools would also help teachers' capacity to make the most of the program.

*In the past, [the E24CG] **hasn't necessarily connected (curriculum, classroom, kitchen, garden)** but we've gotten better and better each year... I've tried to make a little bit of a connection in some of my programs, with literacy especially.*  
(Teacher A, 2023)

## Supporting greater community engagement in the program

The **staff evaluation survey** results presented in Figure 1 showed all 2023 and 2024 surveyed staff, and most in 2022 agreed the E24CG encouraged community engagement.

The sections in Aim 1 Build relationships that help them feel safe, valued and respected by teachers and other adults in their lives and Engagement with others and community groups show how the physical E24CG spaces, their infrastructure and location support community, including families to engage in the E24CG. However, there were challenges in maintaining productive, collaborative relationships resulting from school staff turnover.

While the Winter Feast in 2024 was an excellent example of the E24CG facilitating community engagement, the Feast was largely an introductory, trust building event to engage families with the school through a non-demanding, non-threatening activity. School, community and external stakeholder participants suggested factors that inhibit family and community engagement in E24CG activities such as volunteering in the garden or kitchen. They include self-confidence, a sense of being part of the school community and feeling their contribution would be valued. Participants suggested strategies that might better enable and encourage engagement, some such as Winter Feast-like events are already in place, while others are yet to be trialed. For example, Staff member 5 offered some practical strategies to encourage parent/community engagement:

**Offer them something. A course, a certificate, you know if you help for so many consistent weeks, you receive a food voucher. Things like that would matter.** Like, you know, if I was a mum and I said on Facebook: Term 3 looking for volunteers, help X amount of days, blah blah blah, receive a voucher. Or if you were to help, would you like to get your food certificate? I think **that would give them [parents, community] the incentive to want to come in.**

(Staff member 5, 2022)

Staff member 1 (2022) describes a practical reciprocal strategy that has been implemented and their outcomes:

*The Community Centre runs a **free hot Tuesday dinner** and then **we get all their scraps from that, put them into the garden, they can access anything that we grow. There are actually some dedicated community beds there as well, that they can come and plant and grow and the children can look after that. So, there's opportunities to encourage some really close connections and we really **ought to be building on** as well.***

(Staff member 1, 2022)

The Child and Family Centre use the garden and their own kitchen in programs for parents and children. The children and families develop health literacy and basic literacy and numeracy.

*We use food in our centre quite a lot. So we have a cooking program here on Thursdays, which is called Kids in the Kitchen. The kids cook and the parents help. And so they're doing all sorts of literacy and numeracy... I've had parents saying, 'Oh, yeah, I could never get my head around like quarter of a cup'...*

(Stakeholder 2, 2023)

The Child and Family Centre kitchen garden program also helps transition young children and their families into school. Three or four children start kinder each year without having been to childcare or engaged in playgroup or similar activities.

*if we got kids who have been doing food with us in the centre, and then they going to school and they're doing a food related program in school. It just continues to develop those food related skills, whether it be literacy, numeracy, gross or fine motor skills, solving communication language... If they're familiar with some of these things in the Child and Family Centre, and they do it at school, it's familiar, and then they get to school like, Oh, hang on. I've seen this before. I know a bit about this. I can do this.*

(Stakeholder 2, 2023)

Supporting greater community engagement could be improved through protocols and templates that assist to maintain community relationships over time as staff changes occur. Sharing learnings between schools on involving both community organisations and families who are hesitant to engage is a practical action that could be facilitated through the TAEN or a similar structure.

## Developing links with high schools and career pathways

The **staff evaluation survey** results in Figure 1 showed that staff perceptions that the E24CG helps students decide what to do after they leave school increased over the time of the evaluation.

Bayview Secondary College and CVPS staff and a parent reported that the E24CG facilitated transition to high school by providing a familiar kind of garden environment that helped less academically engaged students in particular, in their transition to high school. However, former CVPS students in grade 7 at Bayview Secondary College (BSC) were disappointed that they had limited opportunities to shape their learning in kitchen and garden environments in ways they were able to at CVPS. As the students who experienced the E24CG progress to senior grades at BSC they will be able to access agriculture, horticulture and hospitality subject options, and **it is possible that their E24CG experiences at CVPS may shape their subject choices and future career pathways.**

While the E24CG gives a taste of what may be possible in the world of post school education and career pathways, these connections could be strengthened, for example through better alignment with the Tasmanian Agricultural Education framework as mentioned above.

*I know there are some kids like [student], who doesn't see himself as a learner necessarily and doesn't see himself as wanting to do long-term education **but wants to be a chef and wants to cook because he loves doing the kitchen.** That fantastic. Had we not had that program in our school, he might not have thought about that as a career. So, I think that's great.*  
(Staff member 3, 2022)

## Summary

While the E24CG has delivered in its vision, further action and investment are needed to ensure it continues. Continued funding and better use of existing available resources are required.

*I think an ideal situation would be having funding that comes through the [government] child health wellbeing strategies that goes directly to the program. And the schools would have a kitchen garden allocated funding budget that wouldn't be impacting their school resource package. That would be a best-case scenario.*  
(Stakeholder 5, 2024)

Further to Stephanie Alexander's curriculum resources (Stephanie Alexander, n.d), the evaluation discovered food and fibre programs with a similar remit to that of the CVPS E24CG which could be explored as a foundation for creating CVPS E24CG specific teaching, learning and professional development resources. Similarly, some resources from the Tasmanian Agricultural Education framework could be useful.

Closer alignment with the TAEN and Tasmanian Agricultural Education framework would better connect the E24CG with the world beyond primary school, to food and fibre and/or hospitality subject choices in secondary school, to post school education and career pathways.

Our conversations with Stakeholder 6 from the TAEN suggest that there are real collaboration possibilities that could be leveraged for better supporting school kitchen gardens within the school system and beyond into post school education and industry supported careers pathways.





# Conclusion

We return to the three overarching evaluation research questions to frame key conclusions.

## RQ 1: In what ways do the processes, outcomes and impacts of the E24CG affect:

- a) inclusion and engagement by the school community: students, parents and caregivers (families), staff and other stakeholders?
- b) engagement in learning and academic outcomes of the students?
- c) development of practical food growing and cooking skills and awareness of healthy eating choices?, and
- d) enhancement of career pathways?

### Inclusion and engagement by the school community: students, families, staff and other stakeholders

The E24CG provides opportunities where students, families and community feel comfortable to engage with each other and the school, as well as providing access to healthy food.

The overarching enablers and inhibitors for developing and enhancing community partnerships include:

- a) parents being actively encouraged and feeling appropriately supported to take up opportunities to physically participate in E24CG contexts
- b) opportunities for parents to participate in activities where they feel safe, valued, and empowered to foster positive relationships
- c) ensuring circumstances and practices that allow partnership/community stakeholder participant cohorts to build relationships are in place
- d) building on successes and actively attend to relationships between participant/stakeholder cohorts
- e) ensuring adequate resources (human and infrastructure) are in place that enable individual and collective community and local stakeholders to pursue new/maintain existing relationships.

While to date only a limited number of family and community members have engaged regularly with the school as volunteers, more events leveraging off the E24CG and its facilities, such as the start of year family breakfast, Harmony Day celebration and the Winter Feast (all in 2024), demonstrably engage a wider range of family and community members who may over time engage more closely with the E24CG.

School-community partnerships and collaborations are very important in community engagement and would benefit from ensuring school-organisation relationships were sustained through turnover of school staff. A protocol could be developed for this purpose.

Engagement in learning and academic outcomes of the students?

The ways in which the E24CG infrastructure and additional kitchen and garden specialist staff time provide new opportunities and impact on learning, including higher school attendance, and can translate into improved academic outcomes are reported in sections Aims 1 and 2 of this report.

The overarching enablers and inhibitors for parents/families engaging with students' learning through the E24CG include:

- authentic experiences that allow parents, families and students to see how skills developed in the extended E24CG can be used at home
- opportunities for parents and families to show their children they value the school and the children's achievements there
- communication channels that successfully conduit information and opportunities that relate to the extended E24CG, where parents and families feel empowered and able to contribute and participate.

Engagement in learning and academic outcomes could be more effectively supported by the E24CG through better alignment of E24CG activities and curriculum. Dedicated lead teacher hours and easy access to appropriate resources and professional development would assist.

## Development of practical food growing and cooking skills and awareness of healthy eating choices?

This has been a key success of the E24CG. While insights examined across Aim 2 discussions elicit opportunities and measures that might enable the E24CG to extend students' nutrition gains in ways that further impact food choices being made in homes and the wider community, it is fair to say that the E24CG is delivering on its aim for students to have **improved access to healthy foods**.

There is evidence that students have improved access to and are eating more nutritious food. They are taking food attitudes home, and many families are using recipes from school at home. However, not all families have changed their habits and choices, with staff reporting that some lunch boxes continue to feature food that is not healthy.

Enablers and inhibitors for parents/families uptake of practical food growing and cooking skills improved healthy eating choices include:

- a) access to material basics (nutritious food, outdoor/green spaces) via the kitchen and garden spaces
- b) attendance and response to shifts in food preferences and choices being made at school, with awareness and consideration of the contextual circumstances that underpin these shifts
- c) mechanisms that invite and enable parents/families to experience the outcomes of participating in healthy eating practices.

## Enhancement of career pathways

There is very limited evidence that the E24CG has impacted student career aspirations or education pathway choices, however closer alignment with the Tasmanian Agricultural Education Framework (DECYP, n.d), and development of a similar approach coordinated across schools in the health, wellbeing and hospitality curriculum and sectors would go some way toward enhanced of understanding of careers and education and training pathways.

## RQ 2: Where does the E24CG achieve outcomes that align with the vision and goals of *It Takes a Tasmanian Village* (DECYP, 2021) and the *Wellbeing for Learning Child and Student Wellbeing Strategy* (DECYP, 2022).

There are multiple alignments, varying from compelling through to emerging evidence of alignment. The below draws from Findings for Aim 1, where we have presented and discussed quantitative and qualitative evidence in context of the six key domains of the above primary strategic policy documents.

We find evidence of alignment with:

**Having material basics:** this evaluation finds students, through their participation in the E24CG:

- have access to nutritious food
- have access to outdoors and green space.

**Learning:** this evaluation finds students, through their participation in the E24CG:

- are more likely to attend school on E24CG days
- feel supported to learn by their caregivers and education providers

have their individual learning needs addressed to allow them to realise their learning potential (although further investment in human resourcing for key personnel role of lead teacher would support classroom teachers and E24CG staff to affect more easeful integration of E24CG activities with the Australian Curriculum)

- develop communicative literacy and numeracy skills appropriate to their age
- learn about their world via connections with nature and the outdoors.

**Feel safe, loved and valued:** this evaluation finds students, through their participation in the E24CG:

- feel safe about their future, their environment, and the climate
- build relationships that help them feel valued and respected by teachers and other adults in their lives (although, there are instances where staff members report safety concerns during their engagements in the E24CG; these relate mostly to encountering challenging/confronting student behaviour and feelings of uncertainty for how to best manage these)

### RQ 3: How might the evaluation findings be applied to further the fulfilment of these strategies, and be applied to similar programs in other school communities?

There are a number of opportunities that the stakeholders commissioning this evaluation could take up to consolidate strengths and build upon the experiences of the CVPS E24CG. Furthermore, findings from this evaluation provide a solid evidence-base for inquiry and systematic changes on a broader, systematic level. Recommendations are for schools, Department of Education Children and Young People and other government departments, funders and collaborations

#### 1. Recommendations for Clarendon Vale Primary School and other schools

- 1.1 We **recommend sustained, further investment in the roles of kitchen and garden specialists, project manager and lead teacher at CVPS**. These roles are key for enablers for the ability of everyone involved in the E24CG to contribute to delivering on its overarching vision.
- 1.2 While the school itself has a limited budget, **there is value in prioritising a designated lead teacher for E24CG**, with hours allocated to the function. This position would be responsible for reinforcing curriculum connection possibilities of the E24CG, sharing of resources to support it within the school and with other schools with kitchen garden programs.
- 1.3 The school should **ensure that professional learning and teaching resources for the E24CG are available** to incoming members of staff.
- 1.4 The school should **continue to use the E24CG to create opportunities for families to be involved at all levels**, from coming along to food centred events, to volunteering in E24CG activities and the school more generally. It takes time, communication and continuity to build trust.

#### 2. Recommendations for Department of Education, Children and Young People and Government

- 2.1 Professional development with **system wide sharing of learnings and resources about school kitchens and gardens** should be established and maintained.
- 2.2 The **Tasmanian Agriculture Education Framework** developed in partnership with the Department of Natural Resources and Environment Tasmania, and associated **Tasmanian Agricultural Education Network (TAEN)** structure should be extended and adapted to include and support school kitchen gardens.
- 2.3 **TAEN's** work (and subsequent resources developed) with school farms in Tasmania provide **exemplars of teaching, learning and professional development resources that could be contextualised for the E24CG at CVPS. Stephanie Alexander curriculum resources should also inform the contextualisation** of E24CG and/or broader KGP resources developed.
- 2.4 **School-community relationships must be nurtured** and considered in the inevitable changes in leadership of organisations, particularly of schools. Templates such as those developed by TAEN for school farms should be developed **to assist schools and communities to manage changes**. These initiatives would benefit from building and leveraging a wider networked system of teaching and learning resource creation/contextualisation with teacher professional organisations in Tasmania. Such networking is likely to enable mutually beneficial collaboration and resource sharing opportunities.
- 2.5 Schools need to be **resourced to effectively participate in and benefit from philanthropic partnerships** such as the E24CG. This evaluation suggests wider view of the costs and benefits of interventions in childhood to improve health literacy and facilitate learning for the diversity of students in government schools and the net cost to governments would be beneficial.

- 2.6 **Cross-government partnerships** between the education and health/hospitality sectors, modelled on examples such as the Tasmanian Agricultural Education Framework, should be explored, with the Department of Health and the Department of State Growth's Creative Industries, Sport and Visitor Economy Division as potential partners.
- 2.7 **Encouraging school-community organisation** partnerships for kitchen gardens is essential. The sharing of the garden between CVPS, Child and Family Centre and Neighbourhood House at CVPS is an excellent example of how a garden eases transitions into school, encourages relationships within the community, and enables healthy eating and outdoor activity. Encouraging partnerships with organisations such as Men's Sheds and community impact projects has student, teacher, school and community wide benefits.
- 2.8 **Encouraging ongoing philanthropic and service organisation partnerships** for school kitchen gardens would provide more resources for schools and foster community understanding of how schools can simultaneously improve academic and health literacy outcomes.
- 2.9 The E24CG program demonstrably supports implementation of DECYP's health and well-being strategies. We therefore recommend **DECYP's continued support for the delivery of the E24CG program.**



### 3. Recommendations for 24 Carrot Gardens program

- 3.1 **A lead teacher position** should be identified at each school, who is **responsible for modelling and leading curriculum connection and enactment possibilities**. While the evaluation has not comparatively examined the utility of the E24CG lead teacher position in relation to lead teacher positions in broader 24CG models/contexts, we posit the demonstrable importance of this position as relevant **for all E24CG iterations of the 24 Carrot Gardens (24CG) model**.
- 3.2 E24CG should **facilitate connections and communication between schools for sharing of resources** with equivalent positions in 24CG and other school kitchen garden programs.
- 3.3 Using the example of the E24CG at CVPS, **recruitment of further and ongoing funding partners will support the sustainability, and continued development and success of the 24CG offering**. Expanding the network of funding contributions will help **mitigate dependency upon any one funder and distribute pressures** that can be felt by a singular or smaller network of funder/s. This will also help **diversify means for developing and mobilising contingencies that arise from funding and staff changes**.
- 3.5 **Collaboration with an expanded network of partners who can contribute in different ways (i.e funding and/or in kind contributions) to the design, development and realisation of 24CG initiatives**, particularly those that result in upgrades of infrastructure and programs such as the Alternative Learning Program model and specialist staffing inherent to the success of CVPS' E24KG.

### 4. Recommendations for funders

- 4.1 **Funding partnerships are essential for the success and sustainability of school kitchen garden programs**. While CVPS derives huge benefit from Material Institute's investment in infrastructure, funding for the **ongoing cost of staffing specialists and project manager positions is critical for sustainability and future benefits**.
- 4.2 **In kind contributions** in the form of volunteers' time, skills and resources, such as food donations for breakfasts and lunches are further ways partners can support the success and sustainability of the E24CG at CVPS, or similar programs at different schools.
- 4.3 Suggestions for **securing and collaborating with further partners** include service clubs and the staff-community programs of some larger employers.

- 4.4 **To understand the long-term impact of the E24CG program, a future evaluation is needed** to ascertain how students' engagement and participation in the E24CG program at CVPS relates to their experiences in similar programs at the secondary level, such as the KGP at Bayview Secondary College. A future evaluation of this nature will generate the evidence needed **to understand how and the extent to which these programs impact students' career aspirations in grades 9-12**.

### 5. Collective recommendations relating to all stakeholders (i.e. school, government, program and funder partners)

- 5.1 **Readiness to be flexible and accommodate contextual factors for partnerships is essential for success**, particularly in school settings. As well as their physical infrastructure, schools vary in the assets of the place they are located, including businesses, industries and strengths and characteristics of the people in the community.
- 5.2 Work in ways that **carefully consider and accommodate the needs, concerns, and strengths of the communities where programs like E24CG operate**. The success of programs like E24CG hinge on all stakeholders understanding and working in ways that support the communities they serve.
- 5.2 **The commitment of all participating stakeholders to communicate and be responsive in their approach is needed**. Stakeholders should collectively articulate this commitment and be clear upon their individual, collective and collaborative expectations and responsibilities for upholding it at all times.

## Final comment

There is compelling evidence that the E24CG spaces facilitate both formal engagement (such as in learning activities) and informal engagement (such as student conversations with volunteers). The diversity of spaces cater for a diversity of student learning needs and preferences; they facilitate school-family and school-community engagement. They help to build trust, social, emotional and health outcomes.

The evaluation's findings are consistent with Stratford et al. (2019) who find that the quality of school-parent-community engagement that underpins educational outcomes and spreads benefits across generations is influenced by school spatial settings.

School staff are key to how the E24CG spaces are used – investment in kitchen and garden specialist positions and teacher time and resources underpin the success or otherwise of the E24CG going forward.

## Opportunities for future inquiry

- How and what does E24CG contribute to the educational experiences and outcomes for Indigenous students and their families?
- A study co-designed with Clarendon Vale community organisations/stakeholders (such as the Neighbourhood House), on the impact of the broader set of health projects in the community, such as 'Love in the Lunchbox' and the Clarence Plains One Community Together project.
- How can schools work with philanthropic organisations? What is the role of DECYP and the philanthropic?
- A follow up study co-designed with the grade 6 CVPS E24CG alumni cohorts at Bayview Secondary College) to ascertain impacts from their CVPS E24CG and Bayview Secondary College 24 Carrot Gardens program experiences, and how they contributed to choice of subject electives and career pathways.





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# Appendix 1

## Clarendon Vale Primary School Kitchen Garden Program Timetables 2021-2024

### Clarendon Vale Primary School: Term 2 2023 Kitchen/Garden Program Timetable

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00-8:45	Breakfast Club		Breakfast Club	Breakfast Club	Breakfast Club Breakfast Club
			Hot Lunch Day		
8:30-9:00	K/G Planning/Set up	Garden - Kachina Serena onsite 9:00-11:30	F'bank Anna (1/month) Serena onsite 9-1130 Alternate learning A/anna	Garden Kachina	Garden Serena Kitchen prep Anna
	Kitchen Serena	Kitchen Katie	Kitchen Serena	Kitchen Lisa	Kitchen Serena Katie
Block 1 9:30-11:00	9:00-9:30 A/L 9:30-10:00 A/L 10:00-10:45 A/L 10:45-11:00 A/L	9:00-9:30 A/L	Alternate learning 9:00 A/L 9:30 A/L 10:00 A/L	A/L-Garden 9:00 A/L 9:30 A/L 10:00 A/L 10:30 A/L	9:00-9:30 Environmental Leaders 5/6
Recess	Garden Club				
Block 2 11:30- 1:00	4/5/6	4/5/6	10:00-12:00 Foodbank Fortnightly 12:00 Set up 12:30 A/L	Garden Group: Groups of 4 Odd Week: Prep Even Week:1/2	2/3 2/3
Lunch					
Block 3 1:30-2:30	Prep	Prep	1/2	1/2	Kinder Kinder
2:30-3:30	Pick up/Prep		Pick up/Prep		Pick up/Prep

### Clarendon Vale Primary School: Term 4 2022 Kitchen/Garden Program Timetable

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:00-8:45	Breakfast Club Cooking leaders (CL) collect fruit		Breakfast Club Cooking leaders (CL) collect fruit	Breakfast Club Cooking leaders (CL) collect fruit	Breakfast Club Breakfast Club CL Collect fruit CL Collect fruit
	Lunch Sandwiches if needed.		Hot Lunch Day 3 CL assist 1250	Lunch Sandwiches if needed.	Hot Lunch Day 3 CL assist Hot Lunch Day 3 CL assist
8:30-9:30	Fruit Shop Anna	Garden Matt	Foodbank Anna (fortnightlyh)	Garden Simon	Harvest for classes Matt Kitchen prep Anna
Block 1 9:30-11:00	9:00-9:30 Meet with Serena 9:30-11:30 Kitchen Prep	• Garden Prep • Harvest for class • Update produce list in kitchen 10:00-10:30 Meet with Serena 10:30-11:00 A/L	9:00-9:30 Environmental Leaders 5/6	5/6	Kinder 9:30-10:15 Small group to kitchen and garden. Short activity. Group discussion and drawing for reflection
Recess					
Block 2 11:30- 1:00	4/5/6N	2/3 AB	4/5/6 C		
	11:45 Matt and Anna to classroom. ½ to kitchen. ½ to garden 12:20 Group in from garden 12:30-12:40 Group discussion 12:40-12:50 Sharing meal 12:50 Clean up	11:45 Simon and Anna to class. ½ to kitchen. ½ to garden (with AB). 12:30 Group in from garden 12:30-12:40 Group discussion 12:40-12:50 Sharing meal 12:50 Clean up	11:45 Matt and Anna to classroom. ½ to kitchen. ½ to garden 12:30 Group in from garden 12:30-12:40 Group discussion 12:40-12:50 Sharing meal 12:50 Clean up		
Lunch					
Block 3 1:45-2:35	Prep J	Prep C	2:00-3:00 KG Team mtg fortnightly (odd weeks) 2:00-2:30 Environmental Leaders fortnightly (even weeks)		
	1:45 Matt and Anna collect 6 students. ½ to kitchen. ½ to garden 2:15 Group reforms in kitchen 2:15-2:35 Share meal and discuss 2:35-2:40 Return to class and share	1:45 Simon and Anna to class. 1/2 to kitchen. 1/2 to garden (with AB) 2:15 Group reforms in kitchen 2:15-2:35 Share meal and discuss 2:35-2:40 Return to class and share			
			EL Collect Compost	EL Compost	
2:30-3:30	Pick up/Prep		Pick up/Prep		Pick up/Prep

### Clarendon Vale Primary School: Term 2 2023 Kitchen/Garden Program Timetable

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:30-8:45	Breakfast Club		Breakfast Club		Breakfast Club
	Lunch Sandwiches if needed		Lunch Sandwiches if needed		Hot Lunch Day 3 CL assist 1250
	Lunch Sandwiches if needed		Lunch Sandwiches if needed		Hot Lunch Day 3 CL assist
8:30-9:30	<b>Fruit Shop</b> Anna	<b>Garden - Kachina</b> Serena onsite 9:00-11:30	<b>F'bank</b> Anna (1/month) Serena onsite 9-1130 <b>Alternate learning</b> A/anna	<b>Garden</b> Kachina	<b>Garden</b> Serena <b>Kitchen prep</b> Anna
<b>Block 1</b> 9:30-11:30	9:00-9:30 Meet with Serena 9:30-11:00 Kitchen/Class Prep	9:30-10:00 Meet with Serena 10:00-11:00 Garden Maintenance	<b>Alternate learning</b> Anna 10:00-10:30 A/L 10:30-11:00 A/L (Serena) A/L (Serena)	<b>Alternate learning</b> Alice 10:00-10:30 A/L 10:30-11:00 A/L	<b>Kinder</b> 9:30-10:15 Small group to kitchen and garden. Return to class for group discussion
<b>Recess</b>					
<b>Block 2</b> 11:30- 1:00	<b>5/6 PC</b> (T/A to assist in garden) 11:45 ½ to kitchen ½ to garden. 12:20 Group in from garden- journals 12:30-12:40 Group discussion 12:40-12:50 Sharing meal 12:50 Clean up	<b>4/5 AB</b> (T/A to assist in garden) 11:45 Kachina/Anna to class. ½ to kitchen ½ to garden. 12:20 Group in from garden- journals 12:30-12:40 Group discussion 12:40-12:50 Sharing meal 12:50 Clean up	<b>Alternate learning</b> Alice 11:30-12:00 A/L 12:00-12:30 A/L 12:30-1:00	<b>2/3 HN</b> (T/A to assist in Garden) 11:45 ½ to kitchen. ½ to garden 12:20 Group in from garden-journals 12:30-12:40 Group discussion 12:40-12:50 Sharing meal 12:50 Clean up	
<b>Lunch</b>					
<b>Block 3</b> 1:45-2:35	<b>Prep /1</b> (alternate fortnightly. Izzy class-even weeks) 1:45 ½ to kitchen ½ to garden. ½ to garden with teacher and T/A support in both 2:15 Journals 12:30-12:40 Group discussion 2:25 Return to class and share	<b>1/2</b> 1:45 Kachina/Anna 6 students. ½ kitchen ½ garden 2:15 Journals 2:30 Return to class and share	<b>Alternate learning</b> Alice 1:30-2:00 A/L 2:00-2:30 A/L	<b>2:00-2:30</b> Environmental Leaders meet fortnightly Anna- newsletter articles/FB posts	
EL Collect Compost					
EL Compost					
2:45-3:30	Pick up/Prep		Pick up/Prep		Pick up/Prep

### Clarendon Vale Primary School: Term 2 2024 Kitchen/Garden Program Timetable

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:00-8:45	Breakfast Club		Breakfast Club		Breakfast Club
	Hot Lunch Day Weekly fruit to classes - Cooking Leaders		Hot Lunch Day		Hot Lunch Day Day-SFM
	Hot Lunch Day		Hot Lunch Day		Hot Lunch Day Day-SFM
	<b>Kitchen-Rose</b>	<b>Garden-Kachina</b> Serena 9:00-11:30	<b>Kitchen-Rose</b>	<b>Garden-Kachina</b> Serena 9:00-3:00	<b>Garden-Kachina</b> Kitchen-Rose, Serena 9:00-11:30
<b>Block 1</b> 9:00-11:00	9:00-9:30 Meet with Serena 9:30-11:00 Kitchen Prep	9:30-10:00 Meet with Serena 9:30-11:00 Garden Maintenance (A/L Serena) 10:15- A/L	<b>Alternate learning</b> (A/L) Rose 9:00- A/L 9:45- A/L 10:30- A/L i	<b>Alternate learning</b> Serena 9:30- A/L 10:00- A/L 10:30- Enviro. Leaders (fortnightly)	<b>Prep/1 (Peter Fey)</b> 9:30-10:15 Meet in class. Small group to kitchen and garden. 10:15-10:30 Meet in class Return to class for group share
<b>Recess</b>					
<b>Block 2</b> 11:30-12:50	<b>4/5/6 (Phobe Connors)</b> (T/A garden) 11:30 Meet in hall. ½ to kitchen ½ to garden. 12:20-12:35 Meal and group share	<b>3/4 (Aiden Lyle)</b> (T/A garden) 11:30 Meet in hall. ½ to kitchen ½ to garden. 12:20-12:35 Meal and group share	A/L Serena A/L 12:00- A/L 12:30- A/L	<b>Kinder</b> (Cassie Jordan) 1:30-12:15 Meet in class. Small group to kitchen and garden 12:15-12:30 Return to class for group share	
<b>Lunch</b>					
<b>Block 3</b> 1:30-2:45	<b>4/5/6 (Adam Buckley)</b> (T/A garden) 1:30- Meet in hall. ½ to kitchen ½ to garden. 2:20 - 2:35 Meal and group share	<b>2/3 (Charm O'Brien)</b> 1:30- Meet in class Small groups to kitchen and garden 2:15-2:30 Return to class for group share	A/L Serena 1:30- A/L 2:00- A/L	<b>1/2 (Taylor Kimberley)</b> 1:30-2:15 Meet in class Small group to kitchen and garden 2:15-2:30 Return to class for group share	
Enviro Leaders Compost					
EL Compost					
2:45-3:30	Pick up/Prep		Pick up/Prep		Pick up/Prep