

## **WELLBEING FOR LEARNING**

EVIDENCE BRIEF ON STUDENT WELLBEING FROM A PILOT IN SCHOOLS



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## **Table of Contents**

About Pivot	3
Executive summary	4
Introducing the Pivot Wellbeing for Learning tool	8
The urgency of student wellbeing	8
The Wellbeing for Learning design process	9
Defining Wellbeing for Learning	10
Resilience	11
Belonging	11
Safety	12
Protective behaviours for wellbeing	13
Implementing the Wellbeing for Learning tool	14
Insights from the pilot of Wellbeing for Learning	15
Schools and students in the pilot	15
Survey validity and design	16
Key findings and insights	17
Students struggling with wellbeing	20
Protective factors	23
Cohort-specific findings and insights	26
Wellbeing among differing community socio-educational advantage	26
Gender	28
Year level	30
Australia and New Zealand	31
Insights from schools	32
Conclusion	34
References	36
Appendix A: Survey Validation	41
Appendix B: Wellbeing for Learning survey items	43



## **About Pivot**

# Helping schools improve teaching practice, student wellbeing and leadership with actionable, data-informed insights.

Pivot Professional Learning (Pivot) is a leading educational company that provides insights on teaching practice for teachers, school leaders and the sector. From our headquarters in Melbourne, we provide practical and evidence-based support to schools and educators across Australia and New Zealand. Our support programs and systems aim to enhance teaching and learning – primarily by harnessing the power of students' voices and providing actionable insights for schools. Our work is supported by international research and data gathered from over 175,000 Australian classrooms.

Pivot's Wellbeing for Learning tool is designed for schools to make it easy to measure, track and support student wellbeing. Aligned with nationally and internationally recognised frameworks on wellbeing, the tool enables targeted evidence-based interventions and broader strategies to support student wellbeing across schools.

Our flagship Student Survey on Teaching provides teachers and schools with reliable, timely and detailed feedback to guide responsive teaching. Pivot's reports are clear, incisive, and easy to digest. Our research-based insights support continuous improvement in classrooms across the country.

Pivot is emerging as Australia's leading survey instrument supporting the improvement of teaching practice. We are now being used in over 700 schools around Australia and have strategically partnered with the following departments and organisations:

- Northern Territory Department of Education
- Tasmanian Department of Education (Mathematics and Science intervention)
- New South Wales Department of Education
- Victorian Department of Education and Training (Professional Learning Communities initiative) and Bastow Institute (Communities of Practice initiative)
- Sydney Catholic Diocese
- Edmund Rice Education Australia
- Catholic Education Diocese of Wagga Wagga
- Queensland Catholic Education Commission
- Teach for Australia
- Australian Association of Mathematics Teachers



## **Executive summary**

#### Introduction

The Pivot Wellbeing for Learning tool is a new, evidence-based application designed to help schools monitor and support the wellbeing of their students. Developed in consultation with wellbeing experts, the tool provides a comprehensive platform to enable schools to monitor their students' wellbeing – and the factors that affect their wellbeing – through surveys of students and other feedback mechanisms. Critically, the tool supports schools to analyse and respond to student feedback – including, where needed, through direct intervention to support individuals facing wellbeing issues.

In recent decades, a strong consensus has emerged among policymakers, practitioners and researchers about the importance of student wellbeing. Multiple research projects and surveys underlined the critical importance of addressing student wellbeing – particularly in the areas of safety, belonging and resilience. The COVID-19 pandemic has increased the urgency of these issues – particularly for children facing economic disadvantage and/or living in marginalised communities.

The 52 schools that took part in this pilot over a 10-week period in late 2021 did so in a uniquely challenging time with the majority of schools in remote learning for part of the implementation. These schools recognised that a strong foundation of student wellbeing is essential both to support students through continued disruptions and help them make up learning losses resulting from the last two years. The Wellbeing for Learning framework and platform was designed for schools to embrace the inseparable goals of positive wellbeing and effective learning.

Schools came from across education systems and sectors, and from a variety of geographical backgrounds across Australia and New Zealand along with two schools in Southeast Asia. The schools engaged with the families in their school community to receive consent for participation and administered the tool over a sequence of weekly check-ins with students. Over 30,000 student responses were recorded, which when analysed serve to support the validation of the tool and provide key findings on student wellbeing.

## Pivot's Wellbeing for Learning tool

Wellbeing for Learning is a framework for measuring student wellbeing and refers to the quality of children's lives while they are at school. Specifically, it can be defined as a sustainable positive state involving students' relationships with themselves and with others, and their experiences in the school environment that contribute to their ability to thrive. The Wellbeing for Learning tool is the product of a rigorous design process, during which Pivot conducted an extensive literature review, pre-testing, expert review, piloting and statistical testing.

Pivot interviewed teachers and students to identify potential issues with how respondents may interpret survey questions, and with other experts including school psychologists, wellbeing staff, researchers and peak bodies to assess content validity. This process resulted in an evidence-based, user-friendly tool for educators and students with a focus on areas of wellbeing that provide a foundation for learning. Pivot developed the Wellbeing for Learning framework underpinning the tool, which defines student wellbeing across three domains: safety, belonging and resilience and a range of protective factors that affect student wellbeing and readiness to learn.

#### How the tool works

The Wellbeing for Learning tool is a digital application that provides schools with a comprehensive platform to monitor their students' wellbeing (and factors that support their wellbeing) through a baseline survey and weekly check-ins, including functionality to notify educators when students are in need of support. The tool also provides support for schools to analyse and act on the feedback, where appropriate with a comprehensive set of whole school and classroom resources.



First, students answered a broad set of 15 questions in a baseline survey on resilience, belonging and safety, making up the domains of the Pivot Wellbeing for Learning framework. Students then answered sets of five questions in one to two minutes per week, over a cycle of 5 check-ins. Each weekly check-in included:

- A general wellbeing question, to gauge how students are feeling at which point students could optout, indicate they were struggling and/or ask to be connected to support from within or beyond the school community
- Three wellbeing questions from across the domains of resilience, belonging and safety to provide a comprehensive picture of student wellbeing across the cycle
- Six protective factors to track students' attitudes towards areas that can support positive wellbeing

### Findings on student wellbeing

#### The general wellbeing of students

The Wellbeing for Learning check-in survey monitored general student wellbeing each week with the question, 'How have you been feeling this week?' on a 5 point scale (1. Struggling, 2. Not So Good, 3. Okay, 4. Good, and 5. Great). Based on the analysis, the pilot revealed:

- On average, students every week were feeling somewhere between 'okay' and 'good' about their wellbeing, with an average general wellbeing score of 3.56
- 11% of students indicated they were "struggling" or "not so good," indicating a significant proportion of students may benefit from wellbeing support each week
- The majority of students who indicated they were struggling with wellbeing were unique each week, with only 15% of students reporting this more than once. This was seen as a key benefit by schools taking part in the trial, who commonly shared their greater capacity to identify and support students in need who had been 'flying under the radar'.
- Of concern is the large proportion of students who both week-to-week and overall are not feeling positively about their wellbeing (either struggling, not so good, or ok). When the three categories reflecting nonpositive wellbeing are considered together, this equates to nearly half of all respondents (47%) who are feeling less than good about their wellbeing.

Each school that completed a cycle had students that reached out for help through the tool's distress protocol.

#### Wellbeing areas of strength and concern for schools

Insights into different aspects of student wellbeing were gleaned from the baseline survey targeting the Wellbeing for Learning domains – resilience, belonging and safety. The pilot showed:

- Resilience was the lowest scoring domain across the data set.
- The three lowest scoring items were:
  - "I can talk to an adult at my school when I have a problem"
  - "I look forward to going to school"
  - "I can ask for help when I need it"
- Early intervention provides significant benefit for young people struggling with their wellbeing and so it
  was concerning to note that two of the lowest three scoring items relate to students feeling able to ask
  for help when they are in need.



Additionally six 'protective factors' were rated during each Wellbeing for Learning check-in – family, friendships, health, hobbies, schoolwork and sleep. The pilot revealed:

- 90% of students rated family and friendships positively (highest scoring protective factors)
- Schoolwork and sleep were the factors with the lowest proportion of positive responses. With more than 1/3 of students struggling with sleep every week
- On an encouraging note, there is a positive correlation between positive ratings on protective factors and general wellbeing scores

#### Differences in wellbeing across cohorts

Data from the baseline survey and the Wellbeing for Learning check in question: How have you been feeling this week? revealed significant differences between girls and boys:

- Boys had a statistically significant higher average general wellbeing score of 3.69 on a 5 point scale, compared with 3.46 for girls
- Boys also reported higher responses relating to the wellbeing domains (resilience, belonging and safety).
   Across the domains, boys scored an average of 3.94 on the 5 point scale compared to 3.79 for girls.

Significant differences were also observed between students attending schools in communities with higher socio-educational advantage (HSEA) and lower socio-educational advantage (LSEA):

- Students in HSEA communities had higher average scores in general wellbeing and across the three domains – resilience, belonging and safety.
- Concerningly, across all individual survey questions, students from communities with lower socioeducational advantage reported lower wellbeing, without exception.

Australian students reported higher levels of wellbeing than New Zealand students in each of the three Wellbeing for Learning domains. Specific differences of note were:

- The safety domain proved to be the biggest difference with Australians students averaging 3.98, and their New Zealand counterparts, 3.81,
- Additionally, the perception of bullying and respect for personal boundaries were significantly lower for students in New Zealand who participated in the pilot.

## The potential impact of the Wellbeing for Learning tool on student wellbeing

The research shows that wellbeing support can have positive and lasting impacts when students reach out and receive the help they need early. Along these lines there were a number of observations that suggest the potential positive impact of the Wellbeing for Learning framework and tool based on the findings of the pilot:

- There was an upward trend across the weekly check-ins in student responses to the question on asking
  for help. This may indicate growing trust and confidence, and warrants further investigation as students
  engage with the tool over a longer period of time.
- Across the course of the pilot, the average general wellbeing of students increased and there were fewer students identified as struggling from weekly check-ins.
- Schools indicated that the tool provided key data and insights about student wellbeing that were not
  previously known



#### **Conclusion and Recommendations**

The pilot of the Pivot Wellbeing for Learning tool has highlighted the profound challenges faced by students and their schools and provided important insights into where future remedial efforts might be best focused. These are the five key recommendations that emerged from the findings of the pilot.

- Recommendation: Identify students early who might be 'flying under the radar' Most students are between "ok" and "good" every week with just over 1 out of 10 students experiencing negative wellbeing. With only 15% of students identifying they were struggling more than once, there were many students in need of support that the schools were unaware of. Schools taking part in the pilot commonly shared their positive experience of identifying students in need of support who had been 'flying under the radar'.
- Recommendation: Support students to identify trusted adults in their school lives
   Many students didn't feel they had a trusted adult at school they could turn to and weren't sure how to ask for help. Given the positive benefits of early intervention for good mental health, this represents a potential barrier to students accessing help, but also an opportunity for schools to provide targeted support at the point of need.
- Recommendation: Develop students' understanding and strategies around protective factors like sleep and schoolwork
   Students who responded positively to protective factors like health, schoolwork and sleep also had higher general wellbeing scores, which is another opportunity for schools to partner with students and the school community to take targeted actions to improve student wellbeing.
- Recommendation: Explore wellbeing approaches that target cohorts who need additional support
  There are significant differences in student wellbeing within and between schools. Of particular note,
  girls had consistently lower levels of wellbeing than boys, and students from communities with lower
  socio-educational advantage had lower levels of wellbeing across the board.
- Recommendation: Monitoring wellbeing using fit-for-purpose, evidence-based tools could have a
  positive impact on student wellbeing
   Even in complex times, schools are committed to measuring and improving student wellbeing and
  have seen the benefit in having regular check-ins with a fit-for-purpose, evidence based tool. There is an
  opportunity for tools like Wellbeing for Learning to have a positive impact on student wellbeing.

As the use of the survey increases in 2022, and data is captured over an entire school year, Pivot will use this information to inform its ongoing research, to refine the survey details and processes, and to provide further support and insights to schools as they emerge.



## Introducing the Pivot Wellbeing for Learning tool

The Pivot Wellbeing for Learning tool is a new, evidence-based application designed to help schools monitor and support the wellbeing of their students. It was created in response to the COVID-19 pandemic, in which students, educators and families across Australia experienced unprecedented stress. As the pandemic unfolded, Pivot Professional Learning, a Melbourne-based educational technology and insights company, engaged in survey research to understand the shifting landscape of Australian schooling. Pivot's reports from this time highlighted the negative impact of the pandemic on wellbeing in schools and furthered the national conversation about the role of schools in the pandemic.¹ Through this research, Pivot recognised the need for school-level tools and resources, especially tools that support a multi-modal, whole-school approach to wellbeing.

At the height of the pandemic, experts advocated for schools to prioritise Maslow's Hierarchy of Needs (i.e., the fundamentals of wellbeing) before Bloom's Taxonomy (i.e., the cognitive challenges that drive rigorous academic learning). However, as Australia's vaccination program continues and a new normal emerges, it is important for schools to pursue improvement strategies that blend Maslow's *and* Bloom's — both wellbeing and academic learning. Pivot designed the Wellbeing for Learning tool to guide schools as they work toward these inseparable goals.

Developed through an intensive, research-driven process in consultation with experts, the Wellbeing for Learning tool takes an assets-based approach to wellbeing: it measures student and school strengths, such as positive coping skills and a supportive climate. In addition, Wellbeing for Learning honours the diversity of Australia's schools, having been designed with an eye toward cross-cultural compatibility. The questions focus on malleable factors that respond to school-based instruction and interventions so educators can target wellbeing supports where they can make the greatest difference.

## The urgency of student wellbeing

Over the last several decades, there has been increasing agreement among policymakers, practitioners and educational researchers about the importance of student wellbeing,<sup>3</sup> including in Australia.<sup>4</sup> Many Australian organisations have undertaken national surveys of wellbeing and safety, issuing comprehensive reports that collectively illustrate urgent need for action.<sup>5</sup> There is ample research evidence demonstrating the critical importance of addressing student wellbeing in the areas of safety, belonging, and resilience. For example:

- Between 2010 and 2014, the Longitudinal Study of Australian Children (LSAC) showed that about a quarter of school-aged young people reported regular bullying and social exclusion.<sup>6</sup> Approximately 20% reported experiencing online bullying.<sup>7</sup>
- In 2015, Australian students had lower levels of school belonging than their peers in 35 OECD countries.
   School belonging has been declining in Australia since 2003.8
- According to the second Australian Child and Adolescent Survey of Mental Health and Wellbeing,
   14% of school-aged Australian children experienced a mental disorder in 2013-2014.9 Further, rates of psychological distress and death by suicide among Australian youth increased between 2007 and 2016.10

Now, more than ever, Australian students need support with their wellbeing. The COVID-19 pandemic has intensified the urgency of understanding and addressing student wellbeing in Australia, particularly that of children and youth facing economic vulnerability or living in marginalised communities. Emerging research is showing how the pandemic's unprecedented challenges have had negative repercussions for the wellbeing of Australian youth:

• Many families with children have reported negative impacts on mental health.<sup>11</sup> For example, a recent survey of adolescents showed a decline in physical activity and measures of happiness.<sup>12</sup>



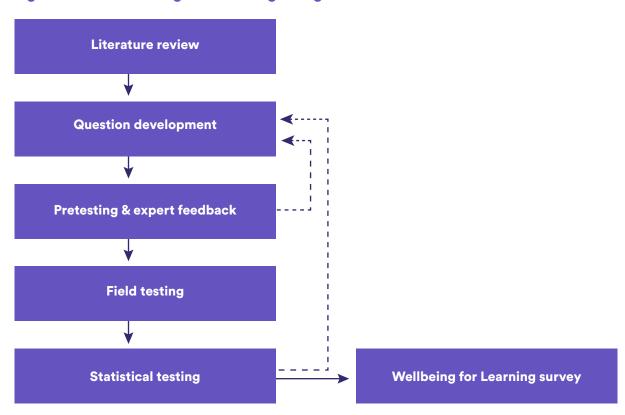
- Kids Helpline reported that duty of care interventions, in which police or ambulance responds to a child
  at imminent risk, were 99% higher across Australia in the first six months of 2021 than they were for the
  same period in 2020; the most common reasons for intervention were suicide attempts and child abuse.<sup>13</sup>
- Pandemic restrictions have impacted the social connectedness of young people. Eighty per cent of
  parents surveyed by the Australian Childhood Foundation reported that their children missed seeing their
  friends, and two-thirds said their children missed seeing extended family.<sup>14</sup>

Pivot's research from the past two years suggests that teachers and school leaders in Australia may be more concerned about student wellbeing than academic learning loss during the disruption of the pandemic. <sup>15</sup> Schools recognise that a strong foundation of student wellbeing will be essential both to support students through continued disruptions, and to make up for any learning losses resulting from the last two years.

## The Wellbeing for Learning design process

Pivot's process in designing the Wellbeing for Learning tool adhered to best practices in survey development, including literature review, extensive pretesting, expert review, piloting and statistical testing.<sup>16</sup> Pivot emphasised validity during early development to maximise the quality of the tool.<sup>17</sup>

Figure 1 The Wellbeing for Learning Design Process



While designing the Wellbeing for Learning tool, Pivot's research and development team engaged in a comprehensive literature review that focused on:

- the essential factors that influence student wellbeing
- the effectiveness of school-based interventions in addressing wellbeing
- the impact of student wellbeing on academic and non-academic outcomes.



Pivot conducted cognitive interviews with teachers and students during pretesting to identify potential issues with how respondents may interpret the survey questions.<sup>18</sup> Pivot also consulted with panels of experts with relevant experience including, school psychologists, wellbeing staff, researchers and peak bodies to assess content validity.<sup>19</sup>

This process resulted in an evidence-based, user-friendly tool for educators and students with a focus on areas of wellbeing that provide a foundation for learning. As more schools implement the tool, Pivot's team will continue to gather feedback and conduct rigorous statistical testing to inform future improvements.

In addition, Pivot is developing parallel surveys for teachers and school leaders in order to provide schools and systems with a comprehensive suite of wellbeing tools that can drive a whole-school approach to wellbeing. Research suggests that comprehensive, whole-school approaches to wellbeing initiatives are more effective than siloed interventions.<sup>20</sup> Complementary tools for students and educators will support schools communities to partner around wellbeing and implement a consistent approach across schools.

## **Defining Wellbeing for Learning**

Wellbeing for learning, or student wellbeing, refers to the quality of children's lives<sup>21</sup> while they are at school.<sup>22</sup> Specifically, it is a sustainable positive state involving students' relationships with themselves, relationships with others and experiences in the school environment that contribute to their ability to thrive. The dynamic nature of student wellbeing is one reason why ongoing monitoring is important.<sup>23</sup> Student wellbeing is strongly linked to academic learning.<sup>24</sup>

Protective factors are strengths or resources that contribute to a positive state of being.<sup>25</sup> Some of these factors are external to students (e.g., family cohesion, social support, safe environment) and others are internal (e.g., social skills, coping skills, strong moral/religious beliefs, cultural identity).<sup>26</sup> The Pivot Wellbeing for Learning framework encompasses internal and external protective factors for wellbeing at school across three domains: safety, belonging, and resilience and a general wellbeing measure. Research shows that each domain influences student learning in the school setting.

Figure 2 The Pivot Wellbeing for Learning framework

Wellbeing for Learning					
General wellbeing					
Resilience		Belongi	ng	Safety	,
<ul><li>Self-advoc</li><li>Growth mi</li><li>Optimism</li><li>Perseveran</li><li>Grit</li></ul>	ndset	• Trusted	riendships d adults identification	• Phys • Onlir • Resp	cional safety ical safety ne safety ect for diversity environment
Protective factors					
Family	Friendships	Sleep	Health	Schoolwork	Hobbies



- · Resilience, which relates to mindsets for wellbeing and learning, involves being able to adapt to adversity.
- Belonging, which addresses relationships at school, refers to feeling accepted and valued by peers and the wider school community.
- Safety, which relates to the school environment, involves feeling and being physically and emotionally safe at school and online.

This framework is broadly consistent with the Australian Student Wellbeing Framework to recognise the connections between student safety, wellbeing and learning outcomes. In addition, the framework aligns with many of the World Health Organisation's global standards for health-promoting schools, recognising the role schools play to provide "a healthy setting for living, learning and working."

#### Resilience

Resilience is the ability to adapt or maintain a positive state of being after experiencing adversity.<sup>28</sup> The Wellbeing for Learning resilience domain measures five interrelated elements of resilience.

#### Figure 3 Elements of the resilience domain

#### Resilience

- Self-advocacy Asking for help when needed
- Growth mindset Belief in the elasticity of one's self and academic abilities and the power of continued
  effort in cultivating learning success
- Optimism Expectation that things will work out positively
- Perseverance Continuing efforts in the face of challenge
- Grit The ability to bounce back from difficulties

Resilience is a key part of student wellbeing.<sup>29</sup> Research shows that the presence of protective factors for resilience is associated with better mental health outcomes<sup>30</sup> and reduced academic stress<sup>31</sup> in children and youth.

Resilience is also associated with better academic performance.<sup>32</sup> When students manage challenges constructively, they can reach their academic potential.<sup>33</sup> For example, the adoption of a growth mindset, which is an element of student resilience, is linked to positive academic achievement.<sup>34</sup> In addition, self-advocacy is positively correlated with motivation.<sup>35</sup>

Research increasingly recognises resilience as a dynamic construct, rather than a static personality trait.<sup>36</sup> Many of the internal factors that support resilience (e.g., growth mindset, optimism, and self-advocacy) are malleable. Thus, school-level interventions can help to cultivate student resilience. Tracking measures of resilience empowers school leaders to identify, implement, and evaluate such interventions.

## **Belonging**

Students' sense of belonging, or connectedness, at school relates to feeling accepted and valued by peers and the wider school community. The extent to which students feel included, respected, and encouraged are important aspects of this.<sup>37</sup>

The Wellbeing for Learning belonging domain measures five interrelated elements of school belonging.



#### Figure 4. Elements of the belonging domain

#### **Belonging**

- Peer belonging feeling accepted and valued by peers
- Close friendships Having one or more trusted friends at school in whom one can confide
- Trusted adults The presence of at least one trusted adult in whom one feels comfortable to confide
- School identification Feelings of connectedness with the school community
- Engagement Active involvement in learning activities

School belonging is fundamentally important to student wellbeing and learning.<sup>38</sup> Overall, feeling connected to the school community is associated with better student outcomes and fewer internalising and externalising problems.<sup>39</sup> Conversely, low levels of school belonging have been linked to future problems with substance abuse and mental illness.<sup>40</sup>

More specifically, trusting, supportive relationships with adults at school are associated with better student adjustment,<sup>41</sup> subjective wellbeing<sup>42</sup> and academic performance.<sup>43</sup> Trusting relationships are likely to support intellectual risk-taking and encourage students' openness to learning.<sup>44</sup> Similarly, peer belonging is linked to positive academic outcomes,<sup>45</sup> and engagement is positively associated with attendance and academic performance.<sup>46</sup> Engagement with school can also provide protection against early school leaving, participation in risky behaviours and mental illness.<sup>47</sup> For these reasons, it is essential that school leaders continuously track feelings of belonging among their students.

## Safety

A safe school is one in which students feel and are safe from harassment, aggression, unwanted physical contact, and bullying. The school community values student diversity, and community members feel respected and included. In addition, students are confident that they will be supported if and when there are threats to their safety or wellbeing.<sup>48</sup>

The Wellbeing for Learning safety domain measures five interrelated elements of school safety.

#### Figure 5 Elements of the safety domain

#### Safety

- Emotional safety Safe from feeling deliberately left out, having rumours spread about oneself, and/or being teased or called names.
- Physical safety Safe from bodily hurt, injury, or unwanted physical contact
- Online safety Safe from cyberbullying
- Respect for diversity Safe from bullying relating to one's identities, including gender, race, ethnicity, and language
- Safe environment General safety of the school environment



School safety is foundational for student wellbeing.<sup>49</sup> A systematic review of academic literature found that not feeling safe at school was linked to being victimised and to mental health challenges.<sup>50</sup> In addition, feeling unsafe at school can undermine student academic performance.<sup>51</sup> Even perpetrators of bullying are at increased risk of low wellbeing and poor academic performance.<sup>52</sup> For these reasons, it is critical for school leaders to engage in ongoing monitoring of the safety of their school's environment.

## Protective behaviours for wellbeing

The Pivot Wellbeing for Learning tool also enables schools to monitor protective behaviours, areas of students' lives that affect their wellbeing and their readiness to learn. The last question of each Wellbeing for Learning survey features a checklist of protective behaviours: family, friendships, health, hobbies, schoolwork and sleep. Students indicate whether they are feeling positively or negatively about each of the five protective behaviours.

#### **Family**

Relationships with family are an important factor in the overall wellbeing of children.<sup>53</sup> Close, positive relationships have a protective effect that supports resilience.<sup>54</sup> Understanding how a student's assessment of their family life correlates with their wellbeing in a learning environment may help schools identify effective support strategies.

#### **Friendships**

Social relationships with peers are a critical element of child wellbeing.<sup>55</sup> Research shows that high-quality friendships support students in identity development and navigating challenges such as bullying and academic stress.<sup>56</sup> Monitoring whether students have a positive or negative assessment of their friendships can assist schools in cultivating social and emotional skill development.

#### Health

Health and healthy behaviours are protective factors that can preserve and enhance wellbeing. Physical activity, for example, has been shown to be positively associated with good feelings and life satisfaction.<sup>57</sup> However, as of 2018, the vast majority of Australian children were not getting the recommended amount of physical activity.<sup>58</sup> Consumption of fruits and vegetables was also low for children.<sup>59</sup> Understanding how students are feeling about their health is important for developing a full picture of their wellbeing at school.

#### **Hobbies**

Participating in fun hobbies and social activities in leisure time outside of school (e.g., play, clubs, sports, religious gatherings and community events) can support positive wellbeing. Tracking how students feel about their hobbies and leisure activities can lead to insights about school-based interventions for enhancing wellbeing, such as afterschool programming.

#### Schoolwork

Academic stress can have a negative impact on wellbeing<sup>61</sup> and academic performance.<sup>62</sup> By tracking students' attitudes toward their schoolwork, the Pivot Wellbeing for Learning tool helps schools understand who is experiencing academic stress, how that may be impacting their wellbeing and develop solutions.

#### Sleep

Despite their developmental need for more sleep than in early and middle childhood,<sup>63</sup> many adolescents do not get enough sleep at night, and this has a deleterious effect on their daytime functioning.<sup>64</sup> Sleep deprivation is associated with an increased risk for mental health problems,<sup>65</sup> lower academic achievement and low self-esteem.<sup>66</sup> Tracking whether students have a positive view of their sleep habits and helping them to develop better sleep habits may positively impact wellbeing for learning.



## The Wellbeing for Learning tool

Developed in consultation with experts, the Wellbeing for Learning tool provides a comprehensive platform to enable schools to monitor their students' wellbeing – as well as the conditions that support it within an education context – through surveys of students at weekly intervals. Critically, the tool also supports schools to analyse and respond to student feedback – including, where needed, through direct intervention for students who may benefit from wellbeing support.

A baseline is set when students answer a complete set of questions from across the three domains of the Pivot Wellbeing for Learning framework. Then each week, students answer a short set of five questions that rotate over a five-week cycle. This allows schools to monitor a broad picture of their students' wellbeing over time. The students themselves spend just one to two minutes per week answering five simple questions covering general wellbeing, the three wellbeing domains: safety, belonging and resilience, and protective behaviours.

#### Q1: General wellbeing

The first question, which is the same each weekly check-in, enables school staff to regularly gauge how students are feeling. It functions as a screening question that helps schools confidentially identify and support students who are struggling with their wellbeing and to respond at the point of need.

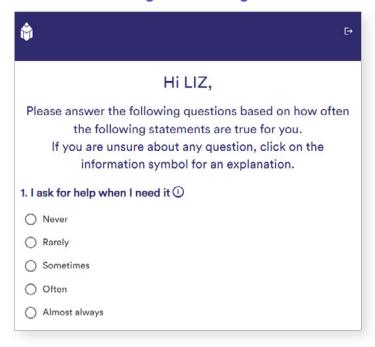
#### Q2 – Q4: Safety, belonging and resilience

Questions two through four are a rotating subset of a 15-item instrument that measures wellbeing for learning in three domains: safety, belonging, and resilience. These questions rotate over the five-week cycle and cover five elements in each wellbeing domain.

#### Q5: Protective behaviours

The last question is a checklist that tracks students' attitudes toward six protective factors that can support positive wellbeing. This checklist is the same every week, allowing schools to track change over time. This can be useful in the planning and evaluation of wellbeing interventions.

Figure 6 A question in the Wellbeing for Learning baseline student survey





Student wellbeing is enhanced when schools adopt evidence-based practices and interventions in partnership with families and communities.<sup>67</sup> Pivot's Wellbeing for Learning tool has been designed to provide insights that help schools to create a learning environment where students thrive. Comprehensive evidence-based resources for supporting student wellbeing are integrated into the platform to support schools to take actions informed by evidence.

Each week, the Wellbeing for Learning platform provides school staff with clear visualisations of real-time survey results, a snapshot of how students are feeling, and a list of students needing support. In addition, the platform generates insights about which student groups have had the most pronounced changes in their general wellbeing compared to the previous week.

Schools can also track trends in student wellbeing over longer periods of time, including before and after implementing specific wellbeing interventions. At the end of each five-week cycle, staff receive a cumulative trends and insights report. Reports can be filtered so schools can identify specific groups of students who may need targeted support in particular areas.

## Insights from the pilot of Wellbeing for Learning

Pivot conducted a pilot of the Wellbeing for Learning tool between August and October 2021. Fifty-two schools took part in the pilot, and over 30,000 responses from students were received. The results provide insights to the baseline and point-in-time wellbeing of students in Australia, New Zealand, Singapore and Vietnam.

Schools showed considerable commitment to their students by opting to pilot the survey at the end of the 2021 school year in a time of extreme complexity. Many schools were navigating significant disruption to normal teaching and learning routines caused by the pandemic, and held additional concerns for the safety and wellbeing of their students during this time.

The findings from this pilot are explored in four sections:

- 1. The schools and students involved in the pilot
- 2. An exploration into the data related to the validity of the survey design
- 3. The key findings and insights that were drawn from the pilot including general findings, and findings related to specific areas of comparative interest (socio-economic, gender and year levels differences)
- 4. An exploration of the experience of schools administering the tool

## Schools and students in the pilot

#### Survey responses

A total of 30,040 surveys were completed across the course of the Wellbeing for Learning pilot. Of the 52 schools who engaged in the pilot:

- 38 schools collected data for the baseline survey and all 5 of the subsequent weekly check-ins
- 10 schools completed the baseline and a smaller number of weekly check-ins
- 4 schools completed the baseline survey only.

In all, 9,756 students completed the baseline survey, with completion rates for the baseline and weekly checkins below.



**Table 1 Survey completion rates** 

Baseline	Check-in 1	Check-in 2	Check-in 3	Check-in 4	Check-in 5
69.66%	56.53%	45.81%	46.24%	42.15%	38.13%

Schools who did not complete all surveys may in part be explained by disruptions with on-site schooling in 2021. Lower completion rates may also relate to the non-mandatory nature of the survey design.

Two of the 52 schools carried out a complete second cycle of surveying, taking their total check-ins to 10, but given this small sample size data from their second cycles has not been included in the analysis for this report.

#### **Timing**

The majority of schools who completed the pilot conducted their initial baseline testing around the beginning of Term 3 in 2021 (late August to early October). For many Australian schools this corresponded with the final few weeks of remote learning and the physical return to school sites. While the influence of these events are not clear at this level, interviews with schools inferred that transitions between remote and on-site schooling impacted completion rates and the number of check-ins that schools were able to administer.

#### **Demographics**

Students from Australia, New Zealand, Singapore and Vietnam were involved in the pilot. Given small numbers from Singapore and Vietnam (one school in each jurisdiction), these schools were not included in the comparative analysis.

Table 2 Geographic location of schools and % students

Country	# Schools	% Survey respondents (students)
Australia	38	81.3%
New Zealand	12	11.5%
Singapore	1	5.4%
Vietnam	1	1.8%

59.2% of the respondents were girls, in part because of a number of single-sex girls schools within the pilot. Over half (57.8%) of respondents were students at secondary schools, with 23.9% primary students and the remainder comprising students from special, P-12, or middle schools (years 4-8).

## Survey validity and design

The pilot of Wellbeing for Learning provided an opportunity to explore the validity of the survey design.

Confirmatory factor analysis (CFA) modeling was conducted on the data, yielding an acceptable fit, as evidenced by the following fit statistics: Root Mean Square Error of Approximation (RMSEA) = 0.071; Comparative Fit Index (CFI) = 0.917; Tucker-Lewis Index (TLI) = 0.899, and Standardized Root Mean Squared Residual (SRMR) = 0.046.

Analysis conducted to understand the construct validity of the survey design found positive correlations between the Wellbeing for Learning domains and questions, particularly questions 8, 9, 12 and 15 (see Appendix B), which spoke to the interrelated nature of the belonging and safety domains. These positive correlations and the above CFA supported the face validity of the tool. Two questions stood out as having slightly weaker correlations (7 and 11). These two questions featured higher means, and a change of question wording was completed for post-pilot administration to align them more closely.



Further detail on the validation process can be found in Appendix A.

Possibilities exist for the further refining and alignment of the tool, to be considered based on the CFA modeling and further administration of the Wellbeing for Learning tool which will provide a larger sample of data and enable questions to be explored over longer periods of time.

As the number of cycles and responses increases, Pivot will look to develop a set of norms around change, to inform principals and teachers in understanding when a drop or rise in a students wellbeing score (or the average for a group), might sit outside of what is expected.

## Key findings and insights

The pilot of Wellbeing for Learning monitored both general wellbeing and domain-specific areas of student wellbeing relating to resilience, belonging, and safety. Students responded to each of 15 wellbeing questions on a five-point frequency scale to establish a baseline, with higher responses indicating stronger wellbeing. After the baseline was set, the tool also monitored general wellbeing and protective behaviours at weekly checkins. Each Wellbeing for Learning check-in survey captured students' feelings about their general wellbeing, and asked students to respond either positively or negatively to indicate how they were feeling about family, friendships, health, hobbies, schoolwork and sleep.

#### General student wellbeing

Each Wellbeing for Learning check-in survey contains the question, 'How have you been feeling this week?' to capture students' feelings about their general wellbeing. Students respond on a 5 point Likert scale from struggling to not so good, okay, good and great, as shown in Figure 7. The general wellbeing measure supports schools to respond in a timely manner when students need help, and to monitor wellbeing trends over time.

The average general wellbeing score from across the weekly check-ins of all students in the pilot was 3.56 on the 5 point scale, corresponding with 'ok' to 'good' on the Likert scale.

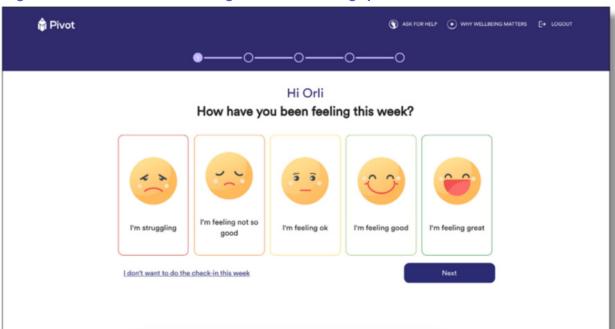


Figure 7 Student's view of the general wellbeing question



#### Wellbeing across domains and areas with lowest and highest scores

The average score for wellbeing across the three domains at the baseline was 3.76. Of the three domains (resilience, belonging, safety) in the baseline survey, safety had the strongest overall average score of 3.97 on the 5 point scale, with resilience proving to be a greater challenge for students, with a score of 3.63. Belonging was not far behind with an average baseline score of 3.67.

Table 3 Averages by Wellbeing for Learning domain from the baseline survey

Resilience (Q1-5)	Belonging (Q6-10)	Safety (Q11-15)
3.63	3.67	3.97

Individual questions with the highest and lowest average scores are shown in Table 4 and include questions from all three domains. The full list of questions in the Wellbeing for Learning survey is in Appendix B. The three highest average scoring questions included two questions relating to safety and one to belonging. The lowest average scoring question related to resilience and the other two lowest scoring questions related to belonging.

#### Table 4 Highest and lowest average scoring questions from the baseline survey

Highest average questions	Lowest average questions
Belonging - I have a friend at school I trust (4.43)  Safety - I feel safe online (4.23)	Resilience - I ask for help when I need it (3.41)  Belonging - I look forward to going to school (3.36)
Safety - I feel safe from bullying at my school (4.00)	Belonging - I can talk to an adult at my school when I have a problem (3.36)

Further analysis of specific Wellbeing for Learning domains is presented in the following section of this review (p. 21).

#### General wellbeing over time

Weekly check-in surveys allow students' general wellbeing to be monitored with the question: *How have you been feeling this week*? The average response for this question across the five check-ins was 3.56.

Figure 8 reflects the general wellbeing of students at the five check-ins completed throughout the period of the pilot, with a slight increase over time. The general wellbeing of boys was notably higher than was reported for girls. While both showed a slight increase across the first four check-ins, an interesting change between boys and girls occurred at the fifth check-in, where the average scores for girls deviated from the emerging trend. While these changes were small, it provides a source of further investigation once more data is available. Further exploration of these changes by gender is contained within the cohort-specific findings section (p.28).





Figure 8 General wellbeing across check-ins

The general increase in general wellbeing shown in Figure 8 was also supported by a decrease in the number of students who reported that they were struggling across the five iterations, however when adjusted for proportion, the percentage of students struggling each week proved to be fairly consistent, with a slight peak during the third and fourth check-ins, see Table 5 below.

Figure 9 provides further insight to the change in reported general wellbeing over the five check-ins. It shows the decrease in completion rates of the check-in survey. It highlights that the majority of students reported consistent levels of wellbeing, with some movement up or down one point, and very little change by more than one point week to week.

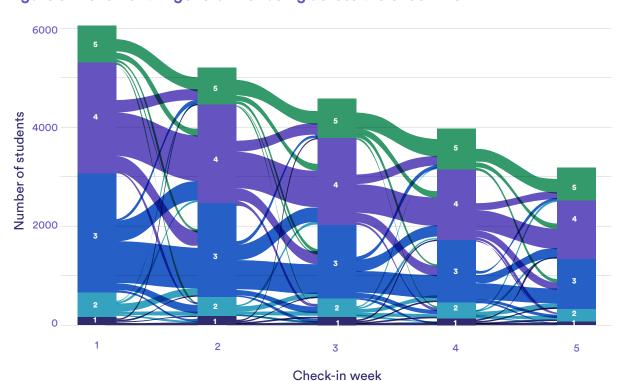


Figure 9 Movement in general wellbeing across the check-ins



#### Students struggling with wellbeing

Students had the option to indicate that they were 'struggling' with their wellbeing when answering the general wellbeing question, reported as a score of 1 on the 5 point Likert scale from 'struggling' to 'great'.

Across the pilot period there were a total of 24,844 responses to the general wellbeing question, including 688 who indicated they were struggling with their wellbeing. Of these 688 students, only 105 (15.3%) reported they were struggling on more than one occasion. The larger majority of these reports were unique responses to that week (84.7%).

A further 2049 responses across the check-in surveys indicated a student was 'feeling not so good.' When considered together with students indicating they are struggling this represented 11.02% of responses indicating they may benefit from wellbeing support.

Of concern is the large proportion of students who both week-to-week and overall are not feeling positively about their wellbeing (either struggling, not so good, or ok). When the three categories reflecting non-positive wellbeing are considered together, this equates to nearly half of all respondents (47%) who are feeling less than good about their wellbeing.

Table 5 Proportion of students who may benefit from wellbeing support across check-ins

	Check-in 1	Check-in 2	Check-in 3	Check-in 4	Check-in 5
	n=6539	n=5577	n=4957	n=4254	n=3517
I'm struggling	2.65%	2.82%	2.88%	2.87%	2.64%
Feeling not so good	8.44%	8.12%	8.37%	8.39%	7.73%
Combined	11.09%	10.95%	11.26%	11.26%	10.38%

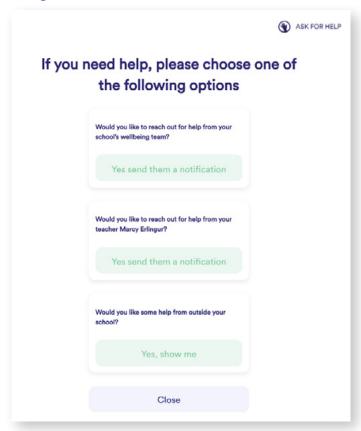
These students 'struggling' and 'feeling not so good' are further explored in the section containing cohort-specific findings.

The Wellbeing for Learning tool provides follow up questions for students who report feeling distressed to help them access support from within or beyond the school, see Figure 10. Notifications are sent to key school staff (e.g., wellbeing team members, pastoral care leaders) so that they can follow up directly with the students and offer support. Information is offered to students about support available beyond their schools (e.g., Kids Helpline or Headspace). At this point the tool also gives students the option to opt out of the remaining survey questions.

As the tool continues to be administered, Pivot will look to analyse how schools are responding to students indicating that they are struggling, and which supports are most effective in improving students' wellbeing.



## Figure 10 A student's experience of reporting distress through the Pivot Wellbeing for Learning tool.



Many students in the pilot used the Wellbeing for Learning check-ins as an avenue to seek help. There is significant potential to support cohorts of students who might not otherwise have been identified as struggling with wellbeing. A number of school leaders shared that use of the check-ins led to the identification of students in need who had been travelling 'under the radar' and could then be connected with support. For these schools, the tool presented an opportunity to ensure students were supported by the right people, and in a timely and responsive manner. The lower proportion of students who repeatedly report that they are struggling suggests that wellbeing support may be needed by many and varied students at any one time. It may also suggest wellbeing can be improved when schools respond at the point of need, even when a student's wellbeing is very low at that point in time.

#### Domains of wellbeing - resilience, belonging and safety

The following section explores the three Wellbeing for Learning domains (resilience, belonging and safety). Students in the pilot answered 15 questions in the baseline survey (average score 3.78), with five questions on each domain. Responses were given on a 5 point Likert frequency scale from never to rarely, sometimes, often and always. Students answered a single question from each domain for a second time at weekly check-ins, with questions changing each week across a five week cycle. Over time, further check-in data will enable longitudinal analysis against the baseline data and provide further insight to baseline findings.

#### Resilience - baseline survey

Resilience was the domain of most concern for student wellbeing within the baseline data with an overall average resilience score of 3.63, the lowest of the three domains. The averages for each resilience question asked at the baseline are in Table 6.



#### Table 6 Average score for resilience questions in the baseline survey

Wellbeing for Learning - Resilience questions	Average baseline student score
Q1: I believe I can learn things that are difficult	3.76
Q2: I keep trying even when my schoolwork is difficult	3.90
Q3: I bounce back quickly after something bad happens	3.52
Q4: I ask for help when I need it	3.41
Q5: I believe things will work out for the best	3.57

Students were most likely to report wellbeing difficulties in the area of asking for help when they needed it with an average score of 3.41 for Q4. This was among the three lowest scores across all 15 domain-specific questions. Another of the lowest scoring questions (Q10 discussed below) indicated many students also didn't feel they have a trusted adult at the school they can turn to and this may have had an impact on whether they felt able to ask for help.

As Wellbeing for Learning provides a way for students to reach out, it was of interest to determine whether students felt better able to ask for help over the course of the pilot. An upward trend was observed in student responses to Q4 across the weekly check-ins: check in-1 (3.34), 2 (3.36), 3 (3.61), 4 (3.55), 5 (3.64). This may indicate growing trust and confidence, although variation in completion rates and the much smaller sample size for the third check-in should also be considered: check-in 1 (n=1,902), 2 (n=1,410), 3 (n=271), 4 (n=1,228), 5 (n=715). These numbers reflect the method of surveying, noting that only a single question from each domain is asked at each check-in and that not all schools administered all five check-ins.

#### Belonging - baseline survey

Belonging had a slightly higher score than resilience with an average baseline student score of 3.67. The averages for each belonging question asked at the baseline are in Table 7.

#### Table 7 Average score for belonging questions in the baseline survey

Wellbeing for Learning - Belonging questions	Average baseline student score
Q6: I look forward to going to school	3.36
Q7: I have a friend at school I trust	4.43
Q8: Students at my school care about me	3.84
Q9: I feel like I belong at my school	3.79
Q10: I can talk to an adult at my school when I have a problem	3.36



Variation was observed within the belonging domain, containing the questions with the highest (Q7) and lowest (Q6 and Q10) average scores at the baseline. Wellbeing support can have positive and lasting impacts when students reach out and receive the help they need early. The low student responses relating to having a trusted adult at school represent a significant opportunity for schools, especially when considered alongside the low response to students feeling they can ask for help (Q4).

One interesting observation on the lowest scoring question was the inconsistency between students in primary and secondary schools. Q10, for example, was low scoring for both cohorts reflecting the consistency of the issue with students feeling confident they have an adult to talk to about problems they may be having. On the other hand, Q6 'I look forward to going to school' only stands out for secondary students and the larger secondary sample (n=7867), compared with primary (n=1832) pulls the overall average down considerably. These differences are further explored in the cohort-specific findings section.

The much higher score for Q7 was possibly due to the wording which emphasised only a single trusted friend as being important for wellbeing. This question has been subsequently adapted to "I have friends at school I can trust" for future administration of Wellbeing for Learning.

#### Safety - baseline survey

Safety was the strongest area within the baseline, with the highest average student score of 3.97. The averages for each safety question asked at the baseline are in Table 8.

#### Table 8 Average score for safety questions in the baseline survey

Wellbeing for Learning - Safety questions	Average baseline student score
Q11: I feel safe online	4.23
Q12: My school is a safe place for me	3.94
Q13: I feel safe from bullying at my school	4.00
Q14: People at my school respect my personal boundaries	3.83
Q15: I can be myself at school	3.83

Across safety questions, online safety (Q11) had the highest average (4.23) with boundaries and the ability to 'be myself at school' rating lowest. Some differences appeared in unpacking cohorts within Q11 with averages slightly lower for primary students (4.12) than for secondary school students (4.24), and slightly higher for boys (4.32) than girls (4.19).

There are notable differences relating to safety questions between communities with higher or lower socioeducational advantage. These differences are further explored in the cohort-specific findings section (p.27).

Some individual safety questions (Q12 & 15) had strong correlations with questions within the belonging domain. With further data available from future cycles of Wellbeing for Learning, it will be possible to consider how these questions are reported in relation to the three domains.



#### **Protective factors**

Table 9 shows the average proportion of positive responses in the baseline survey, in order from most to least positive.

## Table 9 Proportion of positive responses to protective factors in the baseline survey

	Thumbs up
Family	91.3%
Friendships	90.4%
Health	85.9%
Hobbies	82%
Schoolwork	75.1%
Sleep	63.5%

Family and friendships are the protective factors which received the highest proportion of positive responses. Schoolwork and sleep were the factors with the lowest proportion of positive responses, with sleep significantly lower than all other protective factors.

Protective factors were an area that differed between cohort groups and so individual protective factors are explored further in the cohort-specific findings section.

#### The significance of sleep as a protective factor

Sleep was by far the lowest rated of the protective factors, with only 63.5% of students giving sleep a positive response. This low proportion of positive responses was highly consistent throughout the pilot, as seen in the data from weekly check-ins shown in Figure 11.

With close to 40% of students feeling negatively about their sleep behaviours at each weekly check-in, this data adds to the body of research literature identifying sleep as a significant issue for young people. It also represents a significant opportunity for schools to provide targeted support for improving sleep behaviours and attitudes, and a mechanism to evaluate the impact of sleep interventions from within schools.

#### Protective factors over time

Students could respond to a question about protective factors at each check-in, allowing analysis of any change in these indications over the period of the pilot. The average positive response for protective factors was consistent across the check-ins. The consistency of each protective factor across the check-ins can be seen in Figure 11.



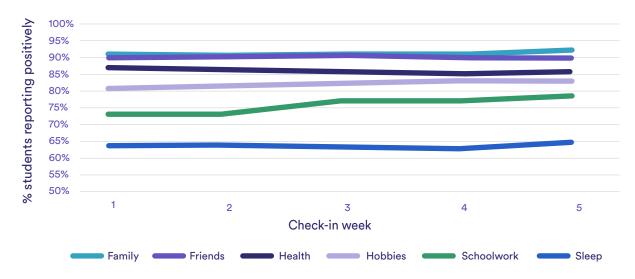


Figure 11 Proportion of positive responses to protective factors over time

Matched student data indicates high consistency in their responses, with very little variation between instances of protective factor questions. Where there was movement, it was usually in one category only, and more often than not this was in a positive direction.

Schoolwork was the protective factor that changed the most over the course of the check-ins. The increase in positive responses relating to schoolwork may be explained by the time at which the survey was delivered, with many schools transitioning from remote to on-site learning. The transition back to schools may have been well received by a number of students and reflected in that check-in question.

There was some indication of very small overall increases in protective factors across the five check-ins, and this would warrant further investigation as additional data is collected. Use of the tool by students, and actions schools take in response to the data may support student wellbeing factors to improve across cycles and this data will be of interest to support use of the tool as a developmental as well as an evaluative instrument.

#### Protective factors and general wellbeing

Data was analysed to consider any connection between protective factor responses and general wellbeing scores. A moderate positive correlation was found between the 'thumbs up' responses to protective factors and scores related to the general wellbeing question (how are you feeling this week) asked at the beginning of each check-in survey.

The strongest positive correlation between a protective factor and general wellbeing was with schoolwork followed by health and sleep. This indicates that by altering the state of these protective factors (such as increasing sleep quality, or decreasing stress around schoolwork), schools can have a direct effect on the wellbeing of students.

These correlations between general wellbeing and protective factors represent strong opportunities for schools to provide targeted support around protective behaviours with the potential for positive influence on general wellbeing. This may be especially important in the area of sleep given the high proportion of students who feel negatively about it, and the connections between sleep issues and mental health issues identified in the research literature.



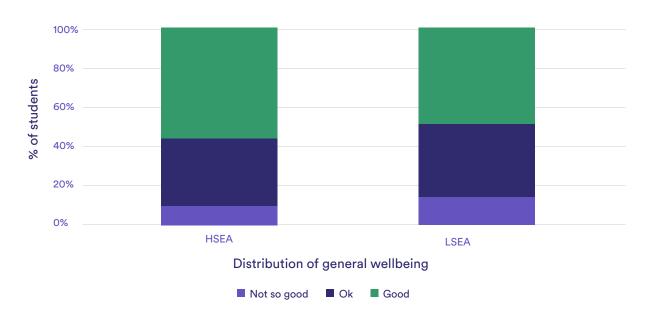
## **Cohort-specific findings and insights**

#### Wellbeing among differing community socio-educational advantage

Data from Australian and New Zealand schools was analysed to consider differences in student wellbeing amongst school communities with varying socio-educational advantage. Australian schools with an Index of Community Socio-Educational Advantage (ICSEA) of less than 1000 and New Zealand schools in Deciles 1 - 5 were considered as communities with lower socio-educational advantage (LSEA) for this analysis. Other schools were considered as communities with higher socio-educational advantage (HSEA).

General wellbeing was considered with reference to the question: *How have you been feeling this week?* For students attending HSEA schools, higher general wellbeing scores were apparent from the check-in surveys (p < .001)<sup>68</sup>, shown in Figure 12. This appears to be a pattern across all of the data, however it should be noted that approximately two thirds of students who completed the surveys come from schools with higher levels of community socio-educational advantage (HSEA n=14,942; LSEA n=7426).

Figure 12 Distribution of general wellbeing by category of advantage



Note. The five-point scale of Wellbeing for Learning was collapsed into three categories for the purposes of visual clarity (e.g., "I'm struggling" and "I'm feeling not so good" collapsed into "Not so good").

Differences in wellbeing between these HSEA and LSEA communities were consistently evident across all three Wellbeing for Learning domains (resilience, belonging and safety). Across all individual survey questions, students from communities with lower socio-educational advantage reported lower wellbeing, without exception. This pattern can be seen in Figure 13, showing the average wellbeing scores from the baseline survey are consistently lower in students from LSEA schools.



5 4.5 Average score (5 point scale) 4 3.5 3 2.5 2 1.5 All Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9 Q10 Q11 Q12 Q13 Q14 Q15 Question LSEA HSEA

Figure 13 Average wellbeing domain question responses by level of advantage

For students attending LSEA schools, safety is evidently a notable concern. The difference in responses between LSEA and HSEA communities were most evident in the following questions, from greatest to least difference:

- Q13: I feel safe from bullying at my school, a question related to safety with a difference in scores of 0.41
  - Average LSEA 3.67 | Average HSEA 4.08
- Q8: Students at my school care about me, a question related to belonging with a difference in scores of 0.39
  - Average LSEA 3.58 | Average HSEA 3.97
- Q14: People at my school respect my personal boundaries, a question related to safety with a difference in scores of 0.36
  - Average LSEA 3.63 | Average HSEA 3.99

Online safety (Q11) follows this trend too with lower scores in students from LSEA schools, but the average is higher than for other questions relating to safety (Q12 to Q15).

There are notable differences between reported wellbeing in LSEA and HSEA communities with regards to protective behaviours, shown in Table 10. A lower proportion of students from LSEA schools responded positively to all protective factors. This is particularly evident for sleep where there is a difference of 5%, and schoolwork, where there is a 7% difference. Hobbies present the lowest difference, with only a 1% difference in positive responses between the two cohorts.



Table 10 Community differences in the proportion of students responding positively to protective factors

	USEA	LSEA
Family	92.59%	88.65%
Friendships	91.41%	88.31%
Health	87.42%	83.41%
Hobbies	82.20%	81.20%
Schoolwork	77.36%	70.43%
Sleep	65.13%	60.95%

#### Gender

General wellbeing data from the Wellbeing for Learning check in question: How have you been feeling this week? revealed notable differences between girls and boys averaged across the five check-ins. Boys had an average general wellbeing score of 3.69, compared with 3.46 for girls, a significant difference (p < .001).

The same pattern of higher reported wellbeing amongst boys was seen in responses related to the wellbeing domains (resilience, belonging and safety). Average scores from across the wellbeing questions were higher for boys (an average score of 3.94 on the 5 point scale) than girls (with an average score of 3.79) (p < .001<sup>69</sup>).

The differences in wellbeing between girls and boys were particularly evident in the questions outlined in Table 11. Of the fifteen questions, girls scored lower on 11 items, had similar scores on 3, and were only higher in one.

Table 11 Questions showing the most variation between boys and girls

	Girls average score	Boys average score
Q3. I bounce back quickly after something bad happens	3.44	3.62
Q9. I feel like I belong at my school	3.72	3.86
Q11. I feel safe online	4.17	4.30
Q15. I can be myself at school	3.75	3.91

The notable exception to the pattern of higher wellbeing for boys related to Q14: *People at my school respect my personal boundaries*. On average, girls were more likely to report that people at school respect their personal boundaries with a score of 3.89 for girls and 3.77 for boys.

The pattern of higher wellbeing of boys was also evident among the students reporting they were struggling with their wellbeing, and this was generally the same across a range of age groups. Table 12 represents the individual general wellbeing responses seen across all five check-ins, where students reported that they were struggling. The number of students reporting that they are struggling is relatively proportionate to the total number of students responding. Even when population is controlled for, girls consistently reported that they were struggling more than boys (2.82% and 2.44% respectively).



Table 12 General wellbeing responses by gender

Response	Girls	Girls Percentage	Boys	Boys Percentage
I'm struggling	398	2.87%	247	2.68%
I'm not so good	1278	9.21%	565	6.13%
ľm Ok	5412	39%	2852	30.96%
I'm good	5047	36.37%	3572	38.78%
I'm great	1741	12.55%	1976	21.45%

Across year levels, girls were far more likely to report that they were struggling, with one exception seen at Year 6 where slightly more boys indicated this. Year 6 presents an outlier within the otherwise consistent pattern seen across the year levels. While the sample is large, the number of students within this year group is small (n≅600) and will therefore be of interest to review once data from future cycles is available.

Table 13 Students reporting distress (I'm struggling) by gender and stage of schooling

Gender	School Level	Number of Responses	Percentage of Responses in this cohort
Girls	P-12	24	1.84%
Girls	Primary	60	2.20%
Girls	Secondary	312	3.20%
Boys	P-12	30	2.64%
Boys	Primary	55	1.99%
Boys	Secondary	150	3.00%

Figure 14 explores the spread of general wellbeing scores for boys and girls, further demonstrating the higher reported wellbeing for boys, with 60% reporting that they are feeling good or great, as compared with only 49% of girls.



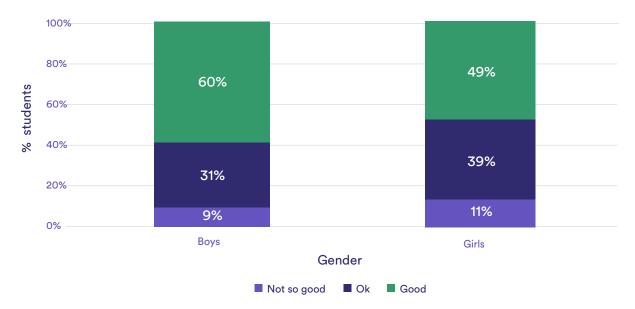


Figure 14 General wellbeing by gender

Note. Five-point Likert scale collapased into three categories for the purposes of visual clarity (e.g., "I feel like I'm stuggling" and "I'm not doing so good" collapsed into "Not so good", "I'm feeling okay" as "OK" and "I'm feeling good" and "I'm feeling great" collapsed into "Good".)

When asked specifically about the protective factors in place, the differing experience for boys and girls was also clear. In no area did girls report higher 'thumbs up' for protective factors, and this was consistent across the cycle of check-ins, as shown below in Table 14. Hobbies and sleep are the protective factors in which boys and girls reported the most different experiences.

Table 14 Percentage of students responding positively to protective factors

	Boys	Girls
Family	92.9%	90.2%
Friendships	91.6%	89.6%
Health	87.9%	84.9%
Hobbies	86.7%	79.2%
Schoolwork	76.3%	74.2%
Sleep	66.8%	61.7%

#### Year level

Non-significant differences were seen between year levels at an overall wellbeing level, by examining the average score from across the three domains of resilience, belonging and safety. It appears that across all domains the highest scores are recorded at Year 3. Wellbeing across the domains, and particularly resilience,



trend slightly downwards as students get older, and this presents an opportunity for further research. As shown in Figure 15, trends emerge in the analysis of the domains - scores highest in safety, followed by belonging and resilience. Only one exception appears at Year 3, where belonging is highest (4.11) of the three domains.

4.5 4 Average (5 point scale) 3.5 2.5 2 1.5 1 Overall Resilience Belonging Safety **Domain** Year 3 6 8 11 12

Figure 15 Wellbeing by year level and domain at baseline

Safety is the one domain which doesn't follow the same downward trajectory in secondary school - with students at years 8, 9 and 10 reporting lower levels of wellbeing through this lens than younger or older students. This is only a minor difference and may benefit from further exploration through additional administration of the Wellbeing for Learning tool. In exploring variation between primary and secondary students, the questions with lowest average show some differences in their experience, all of which reflect the belonging and resilience domains, and these are shown in Table 15. Conversely, there was consistency in the highest rating questions (Q7 & 11), however, the averages were higher overall so this may not accurately reflect the differences as sensitively.

Table 15 Lowest average scores for wellbeing questions at primary and secondary

Lowest average questions (primary)	Lowest average questions (secondary)
Resilience - I bounce back quickly after something	Belonging - I look forward to going to school (3.28)
bad happens (3.49)  Belonging - I can talk to an adult at my school	Belonging - I can talk to an adult at my school when I have a problem (3.30)
when I have a problem (3.60)	Resilience - I ask for help when I need it (3.35)
Resilience - I believe things will work out for the best (3.62)	,

Further investigation into wellbeing trends will be completed as data sets become more robust, representing a larger number of students (particularly Years 3 to 6), and on completion of additional cycles which will allow for the tracking of domain specific wellbeing over time.



#### Australia and New Zealand

Given the sample size from Australia (N=7932) and New Zealand (N=1122), some comparisons can be made. At the baseline, Australian students reported higher levels of wellbeing in each of the three Wellbeing for Learning domains. Safety proved to be the most different between the countries with Australians students averaging 3.98, and their New Zealand counterparts, 3.81. Resilience, the lowest of all domains for both countries, showed very little variation (Australia 3.64 and New Zealand 3.63).

Within the safety domain, two questions (Q13, Q14) highlight the different experiences of students in the two countries. The perception of bullying and personal boundaries as barriers were markedly more concerning for students in New Zealand who participated in the pilot. While this sample of students in itself is relatively large, it is possible that the sample of schools which these students are drawn from doesn't accurately represent the wider population. Cultural differences that exist may alter students' interpretation of the questions, although this could occur within as well as between countries.

Table 16 Averages at baseline survey- safety domain

	Australia	New Zealand
Q11: I feel safe online	4.24	4.14
Q12: My school is a safe place for me	3.94	3.84
Q13: I feel safe from bullying at my school	4.03	3.73
Q14: People at my school respect my personal boundaries	3.86	3.58
Q15: I can be myself at school	3.83	3.77

There are observable differences within the protective factors between the two countries, and unlike in the gender analysis, there is no common pattern as shown in Table 17. Sleep was a greater challenge for the students who took the survey in New Zealand (60% compared with 64% in Australia), however hobbies was where the largest difference was seen (87% compared with 81% in Australia). Whether this remains consistent in future data is a point of interest, given hobbies could have been negatively affected by Covid-19 restrictions for students in New Zealand and Australia to differing degrees.

In both countries, family appears to be a strong protective factor, New Zealand (92.0%) is only slightly higher than the experience reported by Australian students (91.3%), and similarly a difference of less than one percent appears relating to health (81.6% and 86.2% respectively).



#### Table 17 Percentage of students responding positively to protective factors

	Australia	New Zealand
Family	91.3%	92.0%
Friends	90.9%	87.1%
Health	86.2%	85.6%
Hobbies	79.0%	87.1%
Schoolwork	77.3%	81.4%
Sleep	64.2%	60.0%

## Insights from schools

Throughout the pilot, focus groups and regular calls with educators at Pivot captured the experiences of schools using the Wellbeing for Learning tool. A number of themes emerged from these conversations, illustrated with examples from a pilot school leader.

The most commonly cited benefit related to the ability to identify students in need of support. The function that allowed students to indicate they are struggling with their wellbeing identified students who were previously 'under the radar' within schools and was seen as a key benefit.

"Touching base regularly, starting the school morning every morning helping our students be their best and give their best and really looking at their wellbeing is important for us"

The avenue for students to notify teachers and signal their need for help was cited by teachers as a starting point for discrete and effective follow up conversations.

"Information from surveys is managed in a very confidential way. Schools can manage who gets information about the student responses so they can respond."

The regular monitoring and timebound nature of the questions helped schools to provide early intervention, in comparison to their previous experiences of one-off wellbeing surveys. Having a consistent method for monitoring student wellbeing and reporting to wellbeing teams and individual educators helped ensure students' needs were responded to during busy times at the school and when teacher workloads were high.

"Getting to know our students as a whole student, as a whole person, is paramount for our school. It's really important to make sure that they have a trusted teacher they can go to, and that can possibly help them get started on the right foot."

Aggregated data and insights reported for educators using Wellbeing for Learning can be seen in Figure 15. These reports and the resources in the platform were used by groups of leaders and teachers in schools to underpin professional conversations about student wellbeing and to plan for how to meet students' needs from a more informed perspective.



"The resources are very beneficial for understanding and putting in actions to support these behaviours, and the data supports discussion around actions. Students have started to think about protective behaviours and are beginning to understand why it might be impacting how they are feeling overall, and how they can work to improve."

In essence, two key benefits were identified by schools.

The ability to identify and respond to struggling students

Many of these key themes pointed to the importance of the general wellbeing question which captured struggling students efficiently and provided tangible and actionable recommendations to intervene in a way that is responsive to the students preferences. This appeared to offer greater sensitivity than existing processes, identifying students who may otherwise have been overlooked or not used traditional avenues to seek support.

Gathering accurate data to inform decisions

Additionally, schools recognised the benefits of having data that was reflective of the current student experience and the importance of this data for having staff conversations. Professional learning conversations were found to be productive given the immediacy and relevance of the tool and subsequent insights provided.



## Conclusion

The pilot of the Pivot Wellbeing for Learning tool has highlighted the profound challenges faced by students and their schools and provided important insights into where future remedial efforts might be best focused. These are the five key recommendations that emerged from the findings of the pilot.

- Recommendation: Identify students early who might be 'flying under the radar'
- Most students are between "ok" and "good" every week with just over 1 out of 10 students experiencing negative wellbeing. With only 15% of students identifying they were struggling more than once, there were many students in need of support that the schools were unaware of. Schools taking part in the pilot commonly shared their positive experience of identifying students in need of support who had been 'flying under the radar'.
- Recommendation: Support students to identify trusted adults in their school lives
- Many students didn't feel they had a trusted adult at school they could turn to and weren't sure how to
  ask for help. Given the positive benefits of early intervention for good mental health, this represents
  a potential barrier to students accessing help, but also an opportunity for schools to provide targeted
  support at the point of need.
- Recommendation: Develop students' understanding and strategies around protective factors like sleep and schoolwork
- Students who responded positively to protective factors like health, schoolwork and sleep also had
  higher general wellbeing scores, which is another opportunity for schools to partner with students and
  the school community to take targeted actions to improve student wellbeing.
- Recommendation: Explore wellbeing approaches that target cohorts who need additional support
- There are significant differences in student wellbeing within and between schools. Of particular note, girls had consistently lower levels of wellbeing than boys, and students from communities with lower socio-educational advantage had lower levels of wellbeing across the board.
- Recommendation: Monitoring wellbeing using fit-for-purpose, evidence-based tools could have a
  positive impact on student wellbeing
- Even in complex times, schools are committed to measuring and improving student wellbeing and have seen the benefit in having regular check-ins with a fit-for-purpose, evidence based tool. There is an opportunity for tools like Wellbeing for Learning to have a positive impact on student wellbeing.

This report highlights significant differences in student wellbeing that exist within and between schools. Reported wellbeing is significantly and consistently lower for students from school communities with lower socio-educational advantage, and for girls. This provides an opportunity for further research, and for schools to design their responses to improve student wellbeing from an informed perspective, and to target their responses for particular cohorts to the areas they need support the most.

The validation of the tool itself has been supported by data from this pilot, and additional data will provide opportunities for the refinement of alignments for greater construct validation, accuracy and simplification.

As the use of the survey increases in 2022, and data is captured over an entire school year, Pivot will use data from the Wellbeing for Learning tool in its ongoing research and to provide schools and systems with insights into questions like:

- Does use of the tool to monitor and report on student wellbeing have an impact on students feeling able to ask for help?
- How do the patterns in students' feelings of general wellbeing change over the course of a school year?



- What are the relationships between general wellbeing and the specific domains of wellbeing (resilience, belonging and safety)?
- How do targeted interventions to develop protective behaviours impact on students' general wellbeing?
- How do protective factors correlate with other wellbeing domain items within the survey?
- How do changes in the nature of family and peer relationships impact wellbeing for learning?
- At what times of year do different student cohorts experience the most stress around their schoolwork?
- When are students most likely to experience poor sleep? How does this affect their wellbeing?
- How predictive are the protective factors in relation to students reporting that they are struggling in subsequent weeks?
- Does the gap seen in the safety domain remain between Australia and New Zealand with larger samples from New Zealand?
- Which supports offered to struggling students are most effective in improving the wellbeing of students?

Additionally, for schools using both the Wellbeing for Learning tool, and Student Perception Survey on Teaching Effectiveness, possible investigations may explore the link between the two at either a school or cohort level.

Wellbeing for Learning represents an opportunity to support student wellbeing as both a developmental and an evaluative instrument. As more and more students use the tool, and schools take actions to respond, the data can be used by students, teachers and leaders, schools and beyond. This data will be beneficial to consider how best to support student wellbeing in the immediate term at the local level. It can also provide much broader insight, giving a line of sight from students up to the level of education systems and sectors, and providing a means to learn about common student wellbeing needs and the impact of interventions being taken to address them.

For more information about the Pivot Wellbeing for Learning Tool, please contact us at: hello@pivotpl.com



#### References

- Henebery, B. (2021, February 23). Big opportunities for education change in 2021 study. The Educator Australia. https://www.theeducatoronline.com/k12/news/big-opportunities-for-education-change-in-2021--study/275580; The Educator. (2020, July 2). COVID-19 exposes scale of equity gap in schools. The Educator Australia. https://www.theeducatoronline.com/k12/news/covid19-exposes-scale-of-equity-gap-in-schools
- See e.g., Doucet, A., Netolicky, D., Timmers, K., & Tuscano, F. J. (2020, March 29). Thinking about pedagogy in an unfolding pandemic: An independent report on approaches to distance learning during COVID-19 school closures. https://issuu.com/educationinternational/docs/2020\_research\_covid-19\_eng
- Govorova, E., Benítez, I., & Muñiz, J. (2020). How schools affect student well-being: A cross-cultural approach in 35 OECD countries. 431; Pollard, E. L., & Lee, P. D. (2003). Child well-being: A systematic review of the literature. Social Indicators Research, 61(1), 59-78.
- 4 Powell, M. A., & Graham, A. (2017). Wellbeing in schools: Examining the policy-practice nexus. The Australian Educational Researcher, 44(2), 213-231; Redmond et al., 2016; Sollis, K. (2019). Measuring child deprivation and opportunity in Australia: Applying the Nest framework to develop a measure of deprivation and opportunity for children using the Longitudinal Study of Australian Children. ARACY; Wrench, A., Hammond, C., McCallum, F., & Price, D. (2013). Inspire to aspire: Raising aspirational outcomes through a student well-being curricular focus. International Journal of Inclusive Education, 17(9), 932-947.
- 5 Education Services Australia. (2020). The Australian Student Wellbeing Framework. Commonwealth of Australia. https://studentwellbeinghub.edu.au/educators/framework/; Davidson, P., Saunders, P., Bradbury, B., & Wong, M. (2020). Poverty in Australia 2020: Part 1, Overview. ACOSS/UNSW Poverty and Inequality Partnership Report No. 3. Australian Council of Social Service (ACOSS). http://povertyandinequality.acoss.org.au/wp-content/uploads/2020/02/Poverty-in-Australia-2020\_Part-1\_Overview.pdf
- 6 Sollis, 2019
- 7 Baay, A. (2015). A review of literature (2010-2014) on student bullying by Australia's Safe and Supporting School Communities Working Group.
- 8 De Bortoli, L. (2018). *PISA Australia in focus number 1: Sense of belonging at school*. Australian Council for Educational Research (ACER). https://research.acer.edu.au/ozpisa/30
- 9 Lawrence, D., Hafekost, J., Johnson, S. E., Saw, S., Buckingham, W. J., Sawyer, M. G., ... & Zubrick, S. R. (2016). Key findings from the second Australian Child and Adolescent Survey of Mental Health and Wellbeing. Australian & New Zealand Journal of Psychiatry, 50(9), 876-886.
- 10 Australian Research Alliance for Children and Youth (ARACY). (2018). Report Card 2018: The wellbeing of young Australians. Author. https://www.aracy.org.au/publications
- 11 Evans, S., Mikocka-Walus, A., Klas, A., Olive, L., Sciberras, E., Karantzas, G., & Westrupp, E. M. (2020). From 'It has stopped our lives' to 'Spending more time together has strengthened bonds': The varied experiences of Australian families during COVID-19. *Frontiers in Psychology, 11,* 2906.
- 12 Munasinghe, S., Sperandei, S., Freebairn, L., Conroy, E., Jani, H., Marjanovic, S., & Page, A. (2020). The impact of physical distancing policies during the COVID-19 pandemic on health and well-being among Australian adolescents. *Journal of Adolescent Health, 67*(5), 653-661; Tucci, J., Mitchell, J., & Thomas, L. (2020, August). *A lasting legacy The impact of COVID-19 on children and parents*. Australian Childhood Foundation.
- 13 Yourtown. (2021, May 31). New Kids Helpline data reveals spike in duty of care interventions [Press release. https://www.yourtown.com.au/sites/default/files/
- 14 Tucci et al., 2020
- 15 Education Horizons Group. (2021). The voice of Australian educators: 2021 school survey report. Author; Flack, C. B., Walker, L., Bickerstaff, A., & Margetts, C. (2020). Socioeconomic disparities in Australian schooling during the COVID-19 pandemic. Pivot Professional Learning; Flack, C. B., Walker, L., Bickerstaff, A., Earle, H., & Johnson, C. L. (2021). Principal perspectives on the impact of COVID-19: Pathways toward equity in Australian schools. Pivot Professional Learning.



- 16 Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed-method surveys:*The tailored design method. John Wiley; Fowler, F. J. (2009). Survey research methods (4th ed.). SAGE
  Publications; McCoach, D. B., Gable, R. K., & Madura, J. P. (2013). *Instrument development in the affective domain: School and corporate applications* (Third ed.). Springer.
- 17 Gehlbach, H., & Brinkworth, M. E. (2011). Measure twice, cut down error: A process for enhancing the validity of survey scales. *Review of General Psychology*, 15(4), 380-387.
- 18 Beatty, P. C., & Willis, G. B. (2007). Research synthesis: The practice of cognitive interviewing. *Public Opinion Quarterly, 71*(2), 287-311; Collins, D. (2003). Pretesting survey instruments: An overview of cognitive methods. *Quality of Life Research, 12*(3), 229-238; Hughes, D. J. (2018). Psychometric validity: Establishing the accuracy and appropriateness of psychometric measures. In D. J. Hughes, T. Booth, & P. Irwin (Eds.), *The Wiley handbook of psychometric testing: A multidisciplinary approach to survey, scale and test development*. Wiley.
- 19 McCoach, D. B. (2002). A validation study of the school attitude assessment survey. *Measurement and Evaluation in Counseling and Development*, *35*(2), 66; Ruel, E., Wagner, W. E., & Gillespie, B. J. (2015). *The practice of survey research*. SAGE Publications.
- 20 Dix et al., 2020; Goldberg, J. M., Sklad, M., Elfrink, T. R., Schreurs, K. M., Bohlmeijer, E. T., & Clarke, A. M. (2019). Effectiveness of interventions adopting a whole school approach to enhancing social and emotional development: A meta-analysis. European Journal of Psychology of Education, 34(4), 755-782; Runions, K.C., Pearce, N., & Cross, D. (2021). How can schools support whole-school wellbeing? A review of the research. Report prepared for the Association of Independent Schools of New South Wales; Weare, K., & Nind, M. (2011). Mental health promotion and problem prevention in schools: What does the evidence say? Health Promotion International, 26(suppl\_1), i29-i69.
- 21 Casas, F. (2011). Subjective social indicators and child and adolescent well-being. *Child Indicators Research*, 4(4), 555-575; Redmond, G., Skattebol, J., Saunders, P., Lietz, P., Zizzo, G., O'Grady, E., Tobin, M., Thomson, S., Maurici, V., & Huynh, J. (2016). *Are the kids alright? Young Australians in their middle years: Final report of the Australian Child Wellbeing Project*. Flinders University, University of New South Wales and Australian Council for Educational Research. https://research.acer.edu.au
- 22 McLellan, R., & Steward, S. (2015). Measuring children and young people's wellbeing in the school context. Cambridge Journal of Education, 45(3), 307-332.
- 23 Organisation for Economic Co-operation and Development (OECD). (2013). OECD guidelines on measuring subjective well-being. OECD Publishing.
- 24 Australian Catholic University & Erebus International. (2008). Scoping study into approaches to student wellbeing: Literature review. Report to the Department of Education, Employment and Workplace Relations. Author; Dix, K., Ahmed, S. K., Carslake, T., Sniedze-Gregory, S., O'Grady, E., & Trevitt, J. (2020). Student health and wellbeing: A systematic review of intervention research examining effective student wellbeing in schools and their academic outcomes. Main report and executive summary. Evidence for Learning;
- 25 Abu-Ras, W. (2015). Psychological wellbeing: Understanding risk and protective factors. In M. M. Amer & G. H. Awad (Eds.), *Handbook of Arab American Psychology* (pp. 175-187). Routledge.
- 26 Abu-Ras, 2015; Bernard, M. E., & Stephanou, A. (2018). Ecological levels of social and emotional wellbeing of young people. Child Indicators Research, 11(2), 661-679; Dray, J., Bowman, J., Campbell, E., Freund, M., Wolfenden, L., Hodder, R. K., McElwaine, K., Tremain, D., Bartlem, K., & Bailey, J. (2017). Systematic review of universal resilience-focused interventions targeting child and adolescent mental health in the school setting. Journal of the American Academy of Child & Adolescent Psychiatry, 56(10), 813-824
- 27 Jones, J. T. with Furner, M. (1998). *Health-promoting schools: A healthy setting for living, learning and working*. World Health Organization. Health Education & Promotion Unit.
- 28 Dray et al., 2017; Gerber, M., Brand, S., Feldmeth, A. K., Lang, C., Elliot, C., Holsboer-Trachsler, E., & Pühse, U. (2013). Adolescents with high mental toughness adapt better to perceived stress: A longitudinal study with Swiss vocational students. *Personality and Individual Differences*, 54(7), 808-814.
- 29 McLellan & Steward, 2015
- 30 Dray et al., 2017; Dix et al., 2020; Hjemdal, O., Vogel, P. A., Solem, S., Hagen, K., & Stiles, T. C. (2011). The relationship between resilience and levels of anxiety, depression, and obsessive—compulsive symptoms in adolescents. *Clinical Psychology & Psychotherapy, 18*(4), 314-321.



- 31 Huan, V. S., Yeo, L. S., Ang, R. P., & Chong, W. H. (2006). The influence of dispositional optimism and gender on adolescents' perception of academic stress. *Adolescence*, 41(163).
- 32 Kwok, O.-m., Hughes, J. N., & Luo, W. (2007). Role of resilient personality on lower achieving first grade students' current and future achievement. *Journal of School Psychology, 45*(1), 61-82; Trigueros, R., Aguilar-Parra, J. M., Cangas, A. J., Bermejo, R., Ferrandiz, C., & López-Liria, R. (2019). Influence of emotional intelligence, motivation and resilience on academic performance and the adoption of healthy lifestyle habits among adolescents. *International Journal of Environmental Research and Public Health*, 16(16), 2810
- 33 Skinner, E. A., Graham, J. P., Brule, H., Rickert, N., & Kindermann, T. A. (2020). "I get knocked down but I get up again:" Integrative frameworks for studying the development of motivational resilience in school. *International Journal of Behavioral Development*, 44(4), 290-300.
- 34 Aditomo, A. (2015). Students' response to academic setback: "Growth mindset" as a buffer against demotivation. *International Journal of Educational Psychology*, 4(2), 198-222.
- 35 Marchand, G., & Skinner, E. A. (2007). Motivational dynamics of children's academic help-seeking and concealment. *Journal of Educational Psychology*, 99(1), 65.
- 36 Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71(3), 543-562; Tozer, M., Khawaja, N. G., & Schweitzer, R. (2018). Protective factors contributing to wellbeing among refugee youth in Australia. *Journal of Psychologists and Counsellors in Schools*, 28(1), 66-83.
- 37 Dix et al., 2020; Goodenow, C. (1993a). Classroom belonging among early adolescent students: Relationships to motivation and achievement. *The Journal of Early Adolescence*, 13(1), 21-43.
- 38 Cain & Hattie, 2020; Goodenow, 1993a; Goodenow, C. (1993b). The psychological sense of school membership among adolescents: Scale development and educational correlates. *Psychology in the Schools, 30*(1), 79-90.
- 39 Arslan, G. (2019). School belonging in adolescents: Exploring the associations with school achievement and internalising and externalising problems. *Educational & Child Psychology*, *36*(4), 22-33.
- 40 Bond, L., Butler, H., Thomas, L., Carlin, J., Glover, S., Bowes, G. & Patton, G. (2007). Social and school connectedness in early secondary school as predictors of late teenage substance use, mental health, and academic outcomes. Journal of Adolescent Health, 40(357), 357.e9-357.e18; Glover, S., Burns, J., Butler, H., & Patton, G. (1998). Social environments and the emotional wellbeing of young people. Family Matters, (49), 11-16; Marraccini, M. E., & Brier, Z. M. (2017). School connectedness and suicidal thoughts and behaviors: A systematic meta-analysis. School Psychology Quarterly, 32(1), 5; Wormington, S. V., Anderson, K. G., Schneider, A., Tomlinson, K. L., & Brown, S. A. (2016). Peer victimization and adolescent adjustment: Does school belonging matter? Journal of School Violence, 15(1), 1-21.
- 41 Reddy, R., Rhodes, J. E., & Mulhall, P. (2003). The influence of teacher support on student adjustment in the middle school years: A latent growth curve study. *Development and Psychopathology*, 15(1), 119-138.
- 42 Suldo, S. M., Friedrich, A. A., White, T., Farmer, J., Minch, D., & Michalowski, J. (2009). Teacher support and adolescents' subjective well-being: A mixed-methods investigation. *School Psychology Review*, 38(1), 67-85.
- 43 Hattie, J. (2009). Visible Learning: A synthesis of over 800 meta-analyses relating to achievement. Routledge; Klem, A. M., & Connell, J. P. (2004). Relationships matter: Linking teacher support to student engagement and achievement. Journal of School Health, 74, 262-273; Košir, K., & Tement, S. (2014). Teacher-student relationship and academic achievement: A cross-lagged longitudinal study on three different age groups. European Journal of Psychology of Education, 29(3), 409-428.
- 44 Leighton, J. P., Seitz, P., Chu, M. W., & Gomez, M. C. B. (2016). Operationalizing the role of trust for student wellbeing, learning and achievement. *International Journal of Wellbeing*, 6(2).
- 45 Delgado, M. Y., Ettekal, A. V., Simpkins, S. D., & Schaefer, D. R. (2016). How do my friends matter? Examining Latino adolescents' friendships, school belonging, and academic achievement. *Journal of Youth and Adolescence*, 45(6), 1110-1125; Fong Lam, U., Chen, W.-W., Zhang, J., & Liang, T. (2015). It feels good to learn where I belong: School belonging, academic emotions, and academic achievement in adolescents. *School Psychology International*, 36(4), 393-409; Hughes, J. N., Im, M. H., & Allee, P. J. (2015). Effect of school belonging trajectories in grades 6–8 on achievement: Gender and ethnic differences. *Journal of School Psychology*, 53(6), 493-507.



- 46 Abbott-Chapman, J., Martin, K., Ollington, N., Venn, A., Dwyer, T., & Gall, S. (2014). The longitudinal association of childhood school engagement with adult educational and occupational achievement: Findings from an Australian national study. *British Educational Research Journal*, 40(1), 102-120; Anderman, L. H. (2003). Academic and social perceptions as predictors of change in middle school students' sense of school belonging. *The Journal of Experimental Education*, 72(1), 5-22; Appleton, J. J., Christenson, S. L., & Furlong, M. J. (2008). Student engagement with school: Critical conceptual and methodological issues of the construct. *Psychology in the Schools*, 45(5), 369-386; Sánchez, B., Colón, Y., & Esparza, P. (2005). The role of sense of school belonging and gender in the academic adjustment of Latino adolescents. *Journal of Youth and Adolescence*, 34(6), 619-628; Wang, M.-T., & Holcombe, R. (2010). Adolescents' perceptions of school environment, engagement, and academic achievement in middle school. *American Educational Research Journal*, 47(3), 633-662.
- 47 Bang, H., Won, D., & Park, S. (2020). School engagement, self-esteem, and depression of adolescents: The role of sport participation and volunteering activity and gender differences. *Children and Youth Services Review, 113*, 105012; Blondal, K. S., & Adalbjarnardottir, S. (2012). Student disengagement in relation to expected and unexpected educational pathways. *Scandinavian Journal of Educational Research, 56*(1), 85-100; Li, Y., & Lerner, R. M. (2011). Trajectories of school engagement during adolescence: implications for grades, depression, delinquency, and substance use. *Developmental Psychology, 47*(1), 233; Wang, M. T., & Fredricks, J. A. (2014). The reciprocal links between school engagement, youth problem behaviors, and school dropout during adolescence. *Child Development, 85*(2), 722-737.
- 48 DEEWR, 2011, p.2; DEEWR. (2011). *National safe schools framework*. Australian Department of Education, Employment, and Workplace Relations.
- 49 Arslan, G., Allen, K.-A., & Tanhan, A. (2020). School bullying, mental health, and wellbeing in adolescents: Mediating impact of positive psychological orientations. Child Indicators Research, 1-20; Holt, M. K., Vivolo-Kantor, A. M., Polanin, J. R., Holland, K. M., DeGue, S., Matjasko, J. L., Wolfe, M., & Reid, G. (2015). Bullying and suicidal ideation and behaviors: A meta-analysis. Pediatrics, 135(2), e496-e509; Hymel, S., & Swearer, S. M. (2015). Four decades of research on school bullying: An introduction. American Psychologist, 70(4), 293; Macedo, D., Smithers, L., Roberts, R., Paradies, Y., & Jamieson, L. (2019). Effects of racism on the socio-emotional wellbeing of Aboriginal Australian children. International Journal for Equity in Health, 18(1), 1-10.
- 50 Mori, Y., Tiiri, E., Khanal, P., Khakurel, J., Mishina, K., & Sourander, A. (2021). Feeling unsafe at school and associated mental health difficulties among children and adolescents: A systematic review. *Children*, 8(3), 232.
- 51 Cain, T., & Hattie, J. (2020). Attitudes to school and reading achievement among secondary school students. Australian Journal of Education, 64(1), 5-24; Cross, D., Shaw, T., Hearn, L., Epstein, M., Monks, H., Lester, L., & Thomas, L. (2009). Australian Covert Bullying Prevalence Study (ACBPS). Australian Department of Education, Employment and Work Relations; Glew, G. M., Fan, M. Y., Katon, W., Rivara, F. P., & Kernic, M. A. (2005). Bullying, psychosocial adjustment, and academic performance in elementary school. Archives of Pediatrics & Adolescent Medicine, 159(11), 1026-1031; Juvonen, J., Wang, Y., & Espinoza, G. (2011). Bullying experiences and compromised academic performance across middle school grades. The Journal of Early Adolescence, 31(1), 152-173; Moodie, N., Maxwell, J., & Rudolph, S. (2019). The impact of racism on the schooling experiences of Aboriginal and Torres Strait Islander students: A systematic review. The Australian Educational Researcher, 46(2), 273-295.
- 52 Cook, C. R., Williams, K. R., Guerra, N. G., Kim, T. E., & Sadek, S. (2010). Predictors of bullying and victimization in childhood and adolescence: A meta-analytic investigation. *School Psychology Quarterly*, 25(2), 65.
- 53 Casas, 2011; Griggs, J., Tan, J. P., Buchanan, A., Attar-Schwartz, S., & Flouri, E. (2010). 'They've always been there for me:' Grandparental involvement and child well-being. Children & Society, 24(3), 200-214.
- 54 Bond, L., Toumbourou, J. W., Thomas, L., Catalano, R. F., & Patton, G. (2005). Individual, family, school, and community risk and protective factors for depressive symptoms in adolescents: A comparison of risk profiles for substance use and depressive symptoms. *Prevention Science*, 6(2), 73-88; Dray et al., 2017
- 55 Casas, 2011; Goswami, H. (2012). Social relationships and children's subjective well-being. *Social Indicators Research*, 107(3), 575-588.



- 56 Banks, J., & Smyth, E. (2015). 'Your whole life depends on it': academic stress and high-stakes testing in Ireland. Journal of youth studies, 18(5), 598-616; Redmond, G., Skattebol, J., Saunders, P., Lietz, P., Zizzo, G., O'Grady, E., Tobin, M., Thomson, S., Maurici, V., & Huynh, J. (2016). Are the kids alright? Young Australians in their middle years: Final report of the Australian Child Wellbeing Project. Flinders University, University of New South Wales and Australian Council for Educational Research. https://research.acer.edu.au
- 57 García-Hermoso, A., Hormazábal-Aguayo, I., Fernández-Vergara, O., Olivares, P. R., & Oriol-Granado, X. (2020). Physical activity, screen time and subjective well-being among children. *International Journal of Clinical and Health Psychology, 20*(2), 126-134; Holder, M. D., Coleman, B., & Sehn, Z. L. (2009). The contribution of active and passive leisure to children's well-being. *Journal of Health Psychology, 14*(3), 378-386.
- 58 AIFS, 2019
- 59 AIFS, 2019
- 60 Shin, K., & You, S. (2013). Leisure type, leisure satisfaction and adolescents' psychological wellbeing. *Journal of Pacific Rim Psychology*, 7(2), 53-62.
- 61 Banks & Smyth, 2015; Glozah, F. N. (2013). Effects of academic stress and perceived social support on the psychological wellbeing of adolescents in Ghana. Open Journal of Medical Psychology, 2013.
- 62 Sharma, V., Shrivastava, S., Malhotra, S., Singh, R., & Singh, T. B. (2010). Yoga and cognitive behaviour techniques for academic stress and mental wellbeing among school students. *Delhi Psychiatry Journal*, 13(1), 12-19.
- 63 Carskadon, M. A. (1990). Patterns of sleep and sleepiness in adolescents. Pediatrician, 17(1), 5-12.
- 64 Roberts, R. E., Roberts, C. R., & Duong, H. T. (2009). Sleepless in adolescence: prospective data on sleep deprivation, health and functioning. *Journal of adolescence*, 32(5), 1045-1057; Wolfson, A. R., & Carskadon, M. A. (1998). Sleep schedules and daytime functioning in adolescents. *Child Development*, 69(4), 875-887.
- 65 Fredriksen, K., Rhodes, J., Reddy, R., & Way, N. (2004). Sleepless in Chicago: tracking the effects of adolescent sleep loss during the middle school years. Child Development, 75(1), 84-95; Gregory, A. M., & O'Connor, T. G. (2002). Sleep problems in childhood: a longitudinal study of developmental change and association with behavioral problems. Journal of the American Academy of Child & Adolescent Psychiatry, 41(8), 964-971.
- 66 Dahl, R. E., & Lewin, D. S. (2002). Pathways to adolescent health sleep regulation and behavior. *Journal of Adolescent Health*, 31(6), 175-184; Roberts et al., 2009
- 67 Australian Catholic University & Erebus International, 2008
- 68 Tukey multiple comparisons of means: Tukey, John (1949). "Comparing Individual Means in the Analysis of Variance". Biometrics. 5 (2): 99–114.
- 69 Tukey multiple comparisons of means: Tukey, John (1949). "Comparing Individual Means in the Analysis of Variance". Biometrics. 5 (2): 99–114.
- 70 DeVellis, R. (2011). Scale development: Theory and applications. SAGE Publications. Hinkin, T. R. (1998); A brief tutorial on the development of measures for use in survey questionnaires. Organizational Research Methods, 1(1), 104-121.



## **Appendix A: Survey Validation**

The pilot was administered in the second half of 2021 across 52 schools. The fifteen domain specific wellbeing items had a Cronbach's alpha of 0.88, which was well above the minimum threshold of 0.7 for internal consistency reliability<sup>70</sup>. An EFA indicated that a three factor solution was optimal (see Table 11), with the opportunity to increase the fit of groupings in future. The CFA determined the Root Mean Square Error of Approximation (RMSEA) of 0.071, Comparative Fit Index (CFI) of 0.971, Tucker-Lewis Index (TLI) of 0.899, and Standardized Root Mean Squared Residual (SRMR) of 0.046, all indicating acceptable fit.

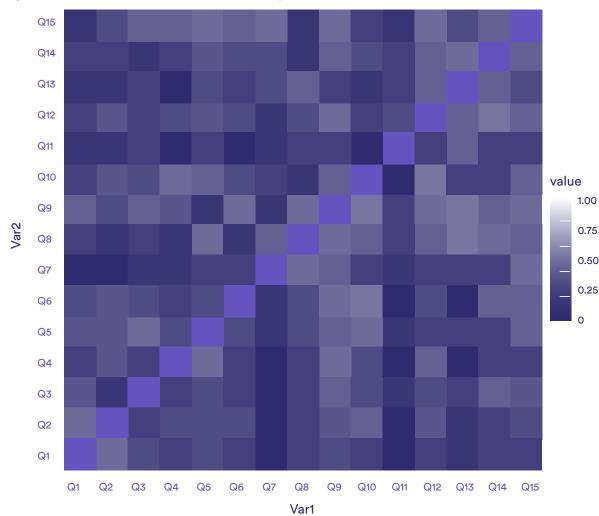


Figure 16 Correlation matrix for survey items

Figure 17 shows that all questions are positively correlated to some degree which was expected given the nature of the survey design. Factor loadings, shown in Table 16, demonstrate the correlations for the wellbeing for learning items against the three factors identified during analysis.



**Table 18 Factor Loadings - Domain specific wellbeing questions** 

	Factor 1	Factor 2	Factor 3
Q1		0.701	
Q2		0.724	
Q3		0.541	
Q4		0.506	
Q5		0.519	
Q6	0.485		
Q7	0.603		
Q8	0.700		
Q9	0.767		
Q10		0.375	
Q11			0.458
Q12	0.505		
Q13			0.699
Q14	0.350		0.434
Q15	0.551		



## **Appendix B: Wellbeing for Learning survey items**

The Wellbeing for Learning survey includes items on general wellbeing, three specific wellbeing domains (resilience, belonging and safety), and six protective factors (family, friendships, sleep, hobbies, health and schoolwork).

All questions are asked during the baseline survey, with a small number representing the three domains asked in each check-in survey:

#### Resilience

Q1: I believe I can learn things that are difficult

Q2: I keep trying even when my schoolwork is difficult

Q3: I bounce back quickly after something bad happens

Q4: I ask for help when I need it

Q5: I believe things will work out for the best

#### **Belonging**

Q6: I look forward to going to school

Q7: I have a friend at school I trust

Q8: Students at my school care about me

Q9: I feel like I belong at my school

Q10: I can talk to an adult at my school when I have a problem

#### Safety

Q11: I feel safe online

Q12: My school is a safe place for me

Q13: I feel safe from bullying at my school

Q14: People at my school respect my personal boundaries

Q15: I can be myself at school

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