

# *Learning at Home*

## *During the COVID-19*

### *Pandemic:*

#### *The Student Experience*

Alan Parsons

**What was challenging?**

*“Being unable to have face to face contact with my classmates, teachers, and other smiling faces. That was the thing I used to look forward to every day.”*

**What did you enjoy?**

*“Watching some of my teachers smile even if we just engage once in their lessons. I love my teachers :)”*

**What should we know?**

*“Understand that we are really trying and really struggling”*

**What worked well?**

*“Learning in the comfort of my own home without needing to wake up early and travel to and from school. I was in charge of my own learning. When I needed to go to the bathroom or eat I didn't need permission”*

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## Introduction:

On Thursday 5 August 2021, in response to the identification of positive cases of COVID-19 infections in the NSW Hunter region, schools were closed, and remote learning commenced. At Newcastle Grammar School, Friday 6 August was designated a student free day in order to provide families and teachers with time to prepare and organise for the move to online teaching. Online teaching and home learning then commenced on Monday 9 August.

After six weeks of home learning, on Friday 17 September, following previous surveys of parents and teaching staff, students in Years 7 to 12 were invited to respond to a survey looking at the impact of the lockdown and learning from home. Feedback was sought from students regarding their experiences on home learning, what was working well, what was most challenging and what suggestions, if any, might they have as we potentially continue in home learning for several more weeks into the new term.

## The National and International Experience – A Brief Review of the Literature:

The literature on the impacts of the COVID-19 pandemic on students, their teachers and their academic and wellbeing outcomes is becoming available as researchers investigate the implications. Given the availability of the literature, it is worth examining the experiences of students at Newcastle Grammar School within the broader context of national and international circumstances.

Since the declaration of the Pandemic and the effect this has had on education systems across the world, a number of studies have been completed and papers written examining the impact on students and teachers. By March of 2020, as part of the effort to contain the spread of COVID-19, schools were closed in over 160 countries (Zierer, 2021). While in some cases, school closures resulted in a lag in academic development, in others, such as was the Swiss experience, “no significant differences could be found between the learning progress of [secondary school] pupils in face-to-face and those in distance learning (Zierer, 2021, p. 212).

Across 9 international studies referred to by Zierer (2021) examining the impact of school closures on mathematics learning, for example, one study found a positive effect (Meeter, 2021), three studies found no significant differences (Depping et al., 2021; Domingue et al., 2021; Tomasik et al., 2021) and four studies showed some negative impact

(Engzell et al., 2021; Kogan & Lavertu, 2021; Maldonado & De Witte, 2021; Schult et al., 2021). The researchers found that primary school students were impacted more than secondary students, that the level of impact was significantly dependent upon individual schools and individual teachers and that the greatest negative impact was to students from economically disadvantaged backgrounds. Meeter's study (2001), Referred to in Zierer's review (2021), that did indicate improvement in skills, was based upon the implementation of a mathematics software program, Snappet, in primary schools in the Netherlands. The results for primary-aged students utilising this program did show improvement in basic mathematical skills that did not "include many word problems for which good reading skills are needed" (Meeter, 2021, p. 9). This therefore may not be a good indicator of growth across the range of schools, students and subjects impacted globally by the pandemic.

In a synthesis of studies across four continents; Europe, North and South America and Asia, overall findings suggest that adolescents who were able to work online at home and connect with peers across virtual platforms were least impacted by school closures (Branje & Morris, 2021). Protective factors against negative outcomes included quality family and friend relationships, self-regulation, and altruistic behaviours such as kindness and gratitude. In this synthesis, overall, around 15% of adolescents reported lower school engagement and higher burnout than would normally be expected. The researchers did, however, find significant heterogeneity in effects, with some adolescents reporting reductions in stress, better sleep patterns, reduced social pressures and quality online connections with friends during at home learning, all of which may lead to developmental benefits. As Hattie (2021) comments, adolescent young people may be more concerned with the impact of remote learning and lockdown on their social connections than the impact on their academic or health outcomes.

An Australian study supports these conclusions, finding little ongoing impact of COVID-19 in students' overall attitude towards their education. Students have transitioned from traditional classroom teaching and assessments with predictability of post-secondary tertiary study, employment and travel. Now they are faced with the prospect of a university system in disarray, rising youth unemployment and interstate and international border closures. Despite this, Patston et al found that students "reported adaptive rather than maladaptive attitudes and behaviours" (2021, p. 13). The researchers found that the reduced emphasis on evaluation and assessment during learning from home provided opportunity to

increase creativity, a condition which is known to enhance resilience, sense of purpose, self-efficacy, and positive mental health.

Given this, it is known that adolescent young people are at greater risk naturally of developing mental health issues compared with adults (Blakemore, 2019; Crocetti et al., 2009; Lawrence, 2015). In a study examining the impact of social isolation and loneliness on the mental health of children and adolescents across Australia, the United States, China and Europe, researchers found that more than one third of adolescents reported heightened levels of loneliness (Loades et al., 2020). Despite this, Loades proposes that the shared experience of social isolation resulting from disease containment measures during the COVID-19 pandemic may mitigate some of the negative impacts on adolescent mental health of isolation and loneliness. This assertion may be supported through a study involving 84 schools in the Netherlands. This study recognises the negative effect that the internalising of problems during adolescence may have, leading to symptoms of anxiety and depression. However good quality friendships and spending time with peers mitigates against the development of depressive symptoms and social anxiety (Bernasco et al., 2021). The authors suggest that “in times of crisis such as the COVID-19 pandemic, adolescents benefit from support of their close friends in the prevention of internalising problems” (Bernasco et al., 2021, p. 700). While prior to the COVID-19 pandemic, around 10% of Australian adolescent students suffered from major depression, anxiety or loneliness, in 2020 during the pandemic, average depression scores went up and social-emotional wellbeing scores went down (Hattie, 2021). Indications however are that, in the 2020 experience of lockdowns and school closures, these scores did bounce back to pre-pandemic levels on return to face-to-face schooling.

Following the return to face-to-face teaching in New South Wales in 2020, Professor Lea Waters and colleagues, from the University of Melbourne Graduate School of Education, undertook a study examining stress-related growth (SRG) in adolescent students returning to school following their learning from home experiences in 2020 (Waters, Allen, et al., 2021). The participants in the study were 404 Years 7 to 12 students from Newcastle Grammar School. The results of this study found that the participants’ cognitive, affective, and social growth was higher than results indicated for other young people returning to school from stressful situations. Waters found that the participants’ SRG was boosted by positive reappraisal, use of character strengths and emotional processing, discussed below.

Positive reappraisal is a cognitive strategy through which meaning is attached to a traumatic event, and has a significant promotive impact on wellbeing. Further, the reported use of character strengths during learning at home showed a significant correlation with participants' SRG. Waters concludes that teaching students to identify and utilise their strengths will be advantageous in providing young people with strategies to manage the effects of the pandemic and future adverse events they may encounter. Finally, their employment of emotional processing skills, that is "the degree to which students identified, validated and expressed their emotions" (p. 8), was also identified as a significant predictor of the participants' SRG.

Being a Visible Wellbeing school, Newcastle Grammar School has adopted the SEARCH Framework as the framework through which wellbeing education is delivered. Students who reported having developed skills taught through the SEARCH Framework, that is, Strengths, Emotional Management, Attention and Awareness, Relationships, Coping, and Habits and Goals were identified through this study as being well able to employ adaptive coping skills during their learning at home experience.

Teacher stress has been identified by UNESCO as an adverse consequence of school closures (UNESCO, 2020). Teacher stress levels have been exacerbated through the abruptness of school closures, the uncertainty around the length of closures and the generally low familiarity that teachers have had with remote online teaching and learning. Heightened stress levels in teachers are associated with lowered self-efficacy and increased intentions to quit the profession (Kim & Asbury, 2020). In a qualitative British study incorporating a series of semi-structured interviews, Kim and Asbury (2020) confirmed that student-teacher relationships along with relationships with colleagues and parents are a source of meaning and purpose for teachers in their profession and a protective factor against stress. Maintaining these relationships during school closures became a major challenge for teachers. The uncertainty of the closures and the transition to remote teaching was described by one participant as "a bit like, you know, you're shown a diagram of how a parachute works and then you're pushed out of the plane" (Kim & Asbury, 2020, p. 1070).

For some teachers, this initial uncertainty was welcomed as a challenge, leading to a sense of accomplishment in rising to and meeting the challenge. Once teachers felt competent with their grasp of remote teaching online, their greatest priority became the wellbeing of their students. Those teachers who were able to observe their students engaging in their

online teaching felt increasing competence and relief, engaging in reflexive practice. They were able to develop their remote teaching pedagogical skills and their students' engagement improved. For some teachers then, the remote teaching experience did lead to opportunities to satisfy the three basic psychological needs of competence, autonomy and relatedness; the core prerequisites for autonomous motivation explained through self-determination theory (SDT) (Deci & Ryan, 2009; Ryan & Deci, 2017) also experienced by the student participants in Patston's research (2021). Significantly, as a consequence of remote learning and teaching, a benefit that became manifest was an increased level of trust between parents and teachers (Kim & Asbury, 2020).

A study of the online teaching experiences of Italian teachers similarly found common areas of concern included maintaining strong and positive student-teacher relationships during remote teaching and learning, and developing confidence in their ability as teachers to implement fair and effective assessment practices (Truzoli et al., 2021). These teachers recognised the acquisition of new skills in their pedagogical repertoire, but were clear that face-to-face teaching in the classroom continues to be their definite preference. Australian teachers report similar concerns for their students' wellbeing and desires to competently teach their subject. Through their remote teaching experiences, teachers became most concerned about the students in their classes who were not actively engaging in the learning process (Davis & Phillips, 2020). This concern and commitment to their students "drove them to work above and beyond contracted hours, working long hours and long days and at night. Many teachers admitted they were struggling, tired and fatigued" (p. 84). A significant finding of the study by Davis and Phillips was the benefits of collaborative practice, with "teachers advising and helping each other, generating new solutions and alternatives within their learning communities" (p. 84).

Laureate Professor Jennifer Gore from the University of Newcastle and colleagues studied the impact of COVID-19 on student learning. In the conclusion to their study, the authors state that their findings "are a testament to the dedicated work of teachers during 2020 to ensure that learning for most students was not compromised despite unusually trying circumstances" (Gore et al., 2021, p. 663).

## The Process:

For the last four weeks of Term 3, during the period of learning from home, students from Year 7 through to Year 12 were invited to participate in a regular morning check-in.

This check-in was a quick, three question survey; Question 1: Rate your happiness from Really Happy, Happy, Not Too Happy or Unhappy. Question 2: Rate your level of engagement in online learning from Really Engaged, Engaged, Somewhat Engaged or Disengaged. Question 3 changed each morning, and was designed to provide a little light relief and stimulate some conversation in the Mentor Roll Call Period, for example; Your favourite Star Wars villain?, Your choice of House if you were enrolled at Hogwarts?, Is pineapple ever okay on pizza? The longitudinal results of these check-ins are illustrated as Figure 1. As can be seen, the responses indicate that most students were happy and engaged on most days. Significantly, each check-in represented a snapshot in time, and this snapshot changed regularly. Happiness and engagement tended to decrease as the lockdown continued, reaching low levels later in each week, and returning to higher levels following the weekend. The distribution of results is illustrated with the box-plots aligned with and below their corresponding column graphs. Importantly, in terms of the current study, this data illustrates the volatility and variability of student emotions over time.

All secondary students from Years 7 to 12 were invited to participate in the current study. Links were sent via their student email accounts to access a survey titled “Surviving and Thriving Through Online Learning – How has the move to online learning impacted your wellbeing and academic development?” In total, over the four days for which the survey was open, 168 responses were received; 79 responses from Year 11 and 12 students and 89 responses from Year 7 to 10 students.

The survey comprised two sections:

**Section 1:** A Likert-style question consisting of 12 items relating to the participants’ social-emotional and academic wellbeing to be ranked across five options from Strongly Disagree to Strongly Agree.

**Section 2:** Three free-text questions:

1. What have you found to be most challenging in your learning at home experience?
2. What have you found to be most rewarding and/or enjoyable in your home learning experience?
3. What suggestions do you have to improve learning at home?

The Likert-style questions were weighted from -2 for ‘Strongly Disagree’ through to +2 for ‘Strongly Agree’. Graphical responses to these questions displaying the weighted

averages are included in the results section of this report, along with the weighted averages responses for teachers and parents from previous surveys of their experiences with teaching and learning through the Pandemic for comparison. The student responses are presented in 2 graphs, one for students in Years 7 to 10 and one for senior students in Years 11 or 12.

The free text questions were studied and classified to identify themes and sub themes, utilising the NVivo platform to code the data.

## Results:

### Section 1: Likert-Style Responses:

Of the student responses to the 12 Likert-style items (see Figs. 2 and 3), only two have a positive weighted average; 'My teachers have been able to design interesting and engaging lessons for us while we have been learning from home', with a weighted average of 0.21, and 'I have had access to the technology I need to engage in learning from home' with a weighted average of 1.49. When divided into junior (7-10) and senior (11-12) responses, the senior students had a stronger positive weighted average for both of these questions, indicating a level of satisfaction and appreciation for the efforts of their teachers and the platform used for implementing the continuity of learning model. In light of the national and international research referred to earlier, this is not surprising.

Overall, students feel strongly that learning online has not had a positive impact on their wellbeing nor that learning online is as supportive of wellbeing as is face-to-face teaching. The older students report more concern with their family and friend relationships than the younger students, but in terms of adolescence and the need to relate to peers, this is not unexpected nor likely to be a continuing concern post lockdown. However, there is indication of resilience in their responses which indicate a much-lessened concern that any negative impact on wellbeing will be ongoing.

Despite predominately positive responses to efforts of their teachers to design interesting and engaging lessons, both groups of students register their decreasing levels of engagement. Interestingly, while the older students were more positive in their recognition of their teachers' efforts, they reported less engagement in lessons, less enjoyment of learning from home and more concern with the potentially negative academic outcomes post-lockdown. Given the stage of these students' educational experience, for Year 11s being at home for the Preliminary Examinations and for Year 12s learning from home in the lead up



to their HSC Examinations, these concerns are to be expected. The research of Zierer (2021), Hattie (2021) and Waters (2021) referred to earlier, particularly in light of the senior students' acknowledgement of both the quality of their access to the learning platform (Microsoft Teams) and the efforts of their teachers in preparing engaging and interesting lessons, suggests that, while these concerns are real and need to be validated, the students will bounce back academically on their return to the classroom.

The weighted average graphs from the previous teaching staff and parent surveys have been included for comparison (Figure 4). There is a strong synergy between the reactions of the teachers and their students. They share the same concerns with regards to

*Figure 2: Responses to Section 1*

|  | STRONGLY DISAGREE | DISAGREE     | NEITHER AGREE NOR DISAGREE | AGREE        | STRONGLY AGREE | TOTAL | WEIGHTED AVERAGE |
|--|-------------------|--------------|----------------------------|--------------|----------------|-------|------------------|
| I have had the access to the technology I need to engage in learning from home                                     | 2.38%<br>4        | 1.19%<br>2   | 2.98%<br>5                 | 32.74%<br>55 | 60.71%<br>102  | 168   | 1.49             |
| Learning from home has had a positive impact on my social-emotional wellbeing                                      | 25.60%<br>43      | 33.33%<br>56 | 29.17%<br>49               | 10.71%<br>18 | 1.19%<br>2     | 168   | -0.79            |
| I find learning online to be similar, in terms of my wellbeing, as teaching face-to-face                           | 29.34%<br>49      | 46.71%<br>78 | 13.77%<br>23               | 8.38%<br>14  | 1.80%<br>3     | 167   | -1.11            |
| Overall, I have enjoyed the experience of learning from home.  | 19.05%<br>32      | 27.38%<br>46 | 30.36%<br>51               | 19.05%<br>32 | 4.17%<br>7     | 168   | -0.46            |
| I have put about the same effort into learning at home as I do when I am at school.                                | 21.43%<br>36      | 27.98%<br>47 | 16.07%<br>27               | 23.81%<br>40 | 10.71%<br>18   | 168   | -0.32            |
| Learning from home has enabled me to build my relationships with my family and friends                             | 16.67%<br>28      | 27.38%<br>46 | 30.95%<br>52               | 19.64%<br>33 | 5.36%<br>9     | 168   | -0.41            |
| I don't think learning from home will have a long term negative impact on my wellbeing                             | 16.67%<br>28      | 18.45%<br>31 | 24.40%<br>41               | 33.93%<br>57 | 6.55%<br>11    | 168   | -0.07            |
| I don't think learning from home will have a long term negative impact on my academic growth                       | 20.83%<br>35      | 25.00%<br>42 | 28.57%<br>48               | 20.24%<br>34 | 5.36%<br>9     | 168   | -0.40            |
| In the last week of online learning, I have been well engaged in my lessons.                                       | 27.98%<br>47      | 25.60%<br>43 | 22.02%<br>37               | 17.86%<br>30 | 6.55%<br>11    | 168   | -0.48            |
| I have been able to maintain connection with my friends, teachers and classmates through learning on TEAMS.        | 13.69%<br>23      | 29.76%<br>50 | 21.43%<br>36               | 29.76%<br>50 | 5.36%<br>9     | 168   | -0.33            |
| My teachers have been able to design interesting and engaging lessons for us while we have been learning from home | 8.93%<br>15       | 13.69%<br>23 | 31.55%<br>53               | 33.93%<br>57 | 11.90%<br>20   | 168   | 0.21             |
| There has been a good balance of learning on-screen and learning off-screen during learning at home.               | 32.74%<br>55      | 30.36%<br>51 | 23.21%<br>39               | 10.71%<br>18 | 2.98%<br>5     | 168   | -0.77            |

screen time, academic growth and social-emotional wellbeing during home learning. While students overall appreciate the efforts of their teachers in preparing engaging lessons, teachers report that the time spent in preparation is significantly more than during face-to-face lessons. Given the decision to employ a model that leans more towards synchronous than asynchronous teaching and learning – teachers and students are online in the virtual classroom for all their timetabled lessons – along with the professional drive of teachers to provide high quality learning experiences for their students, this is not unexpected. This again reflects the findings of research by Davis and Phillips (2020) referred to earlier.

The Likert responses of the parent group that responded to the previous survey were all significantly positively weighted. As observers once removed from direct involvement in the teaching and learning process, their response may be less impacted by the changes being experienced by teachers and students and more impacted by the reality of their observations of their children’s online learning from home. While the concerns and challenges indicated through the responses by both students and teachers reflect their reality and hence deserve validation, observations by parents such as the following along with the results displayed above suggest, in keeping with the research evidence, that any wellbeing or academic setbacks are, in the main, likely to be temporary.

- The teacher engagement with the students has been great and it’s been fantastic that they have followed the same timetable as in school.
- Our child has continued to be engaged with active learning. The school has not simply dumped a weeks’ worth of resources on them and left them to sink or swim. I love that they are talking with teachers and other students.
- The genuine concern and support from the school relating to wellbeing and expectations around completing work.

## Section 2: Open-ended Free Text Responses:

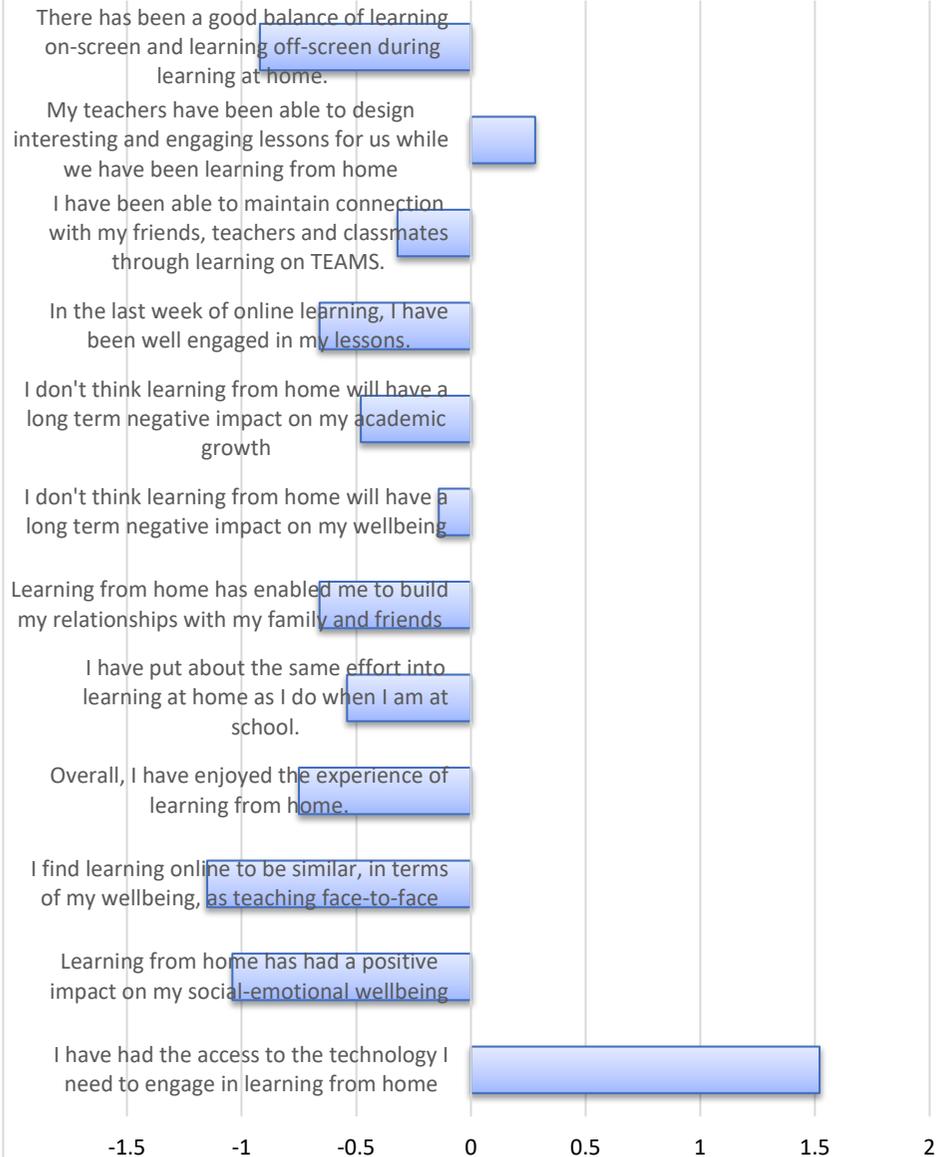
Student respondents were then provided with an opportunity to reflect on their online learning experiences and to respond to three open-ended free-text questions:

1. What have you found to be most challenging in your learning at home experience?
2. What have you found to be most rewarding and/or enjoyable in your home learning experience?
3. What suggestions do you have to improve learning at home?

Figure 3: Weighed Averages for Student Responses

**Years 11 and 12**

Statements relating to social-emotional and academic wellbeing from Strongly Agree to Strongly Disagree. Weighted Average



**Years 7 - 10**

Statements relating to social-emotional and academic wellbeing from Strongly Agree to Strongly Disagree. Weighted Average

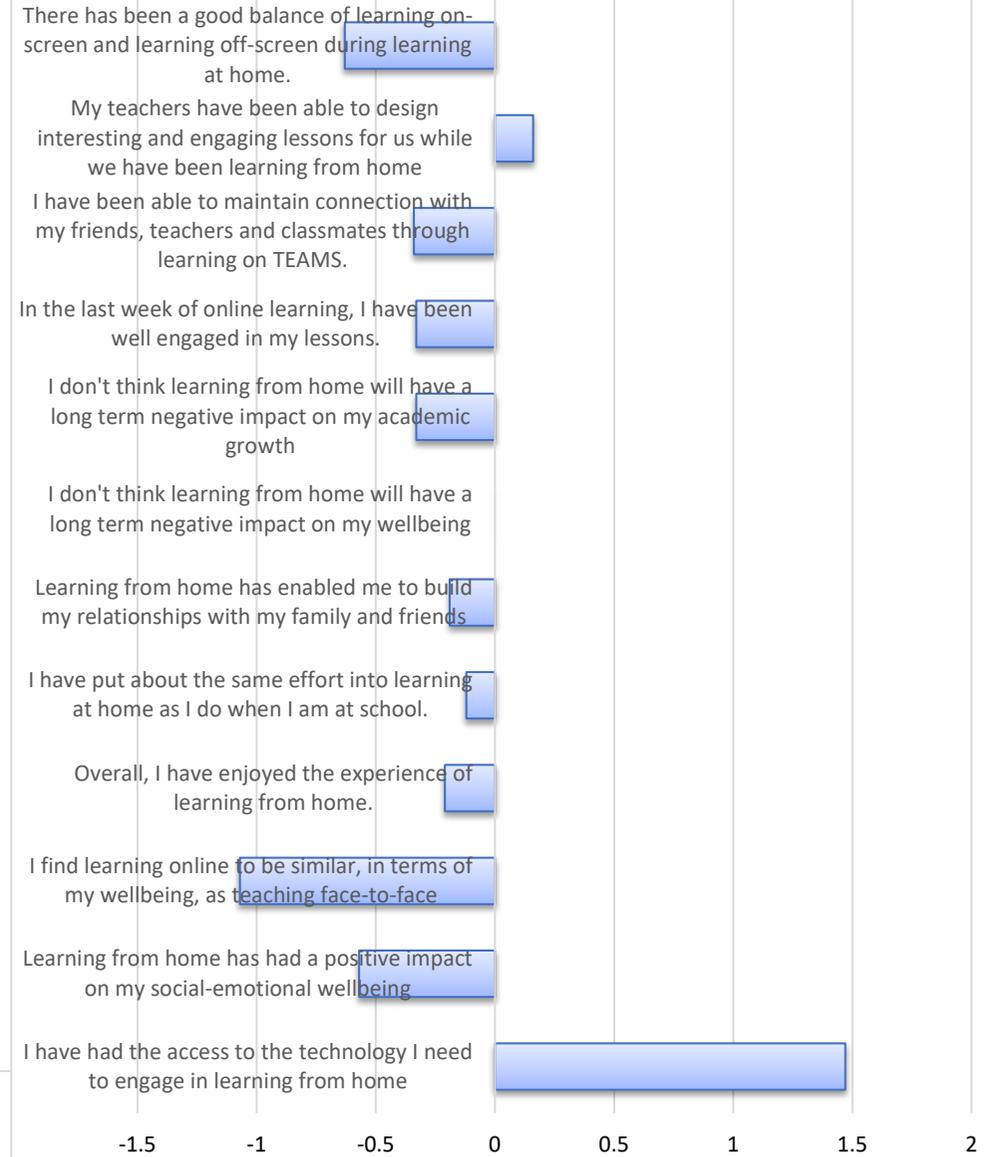


Figure 4: Weighed Averages for Teacher

**Secondary Teaching Staff**

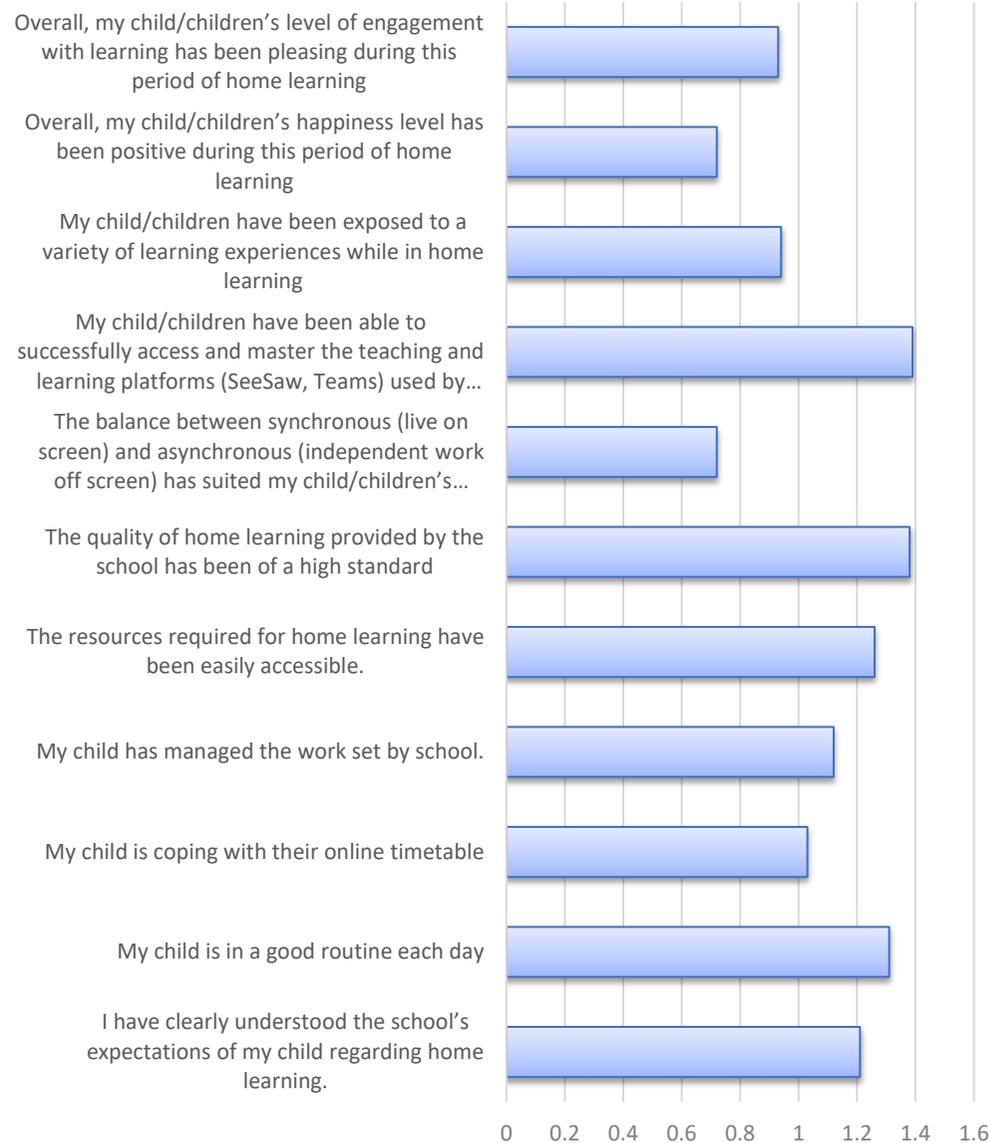
Statements relating to teaching online from Strongly Agree (2) to Strongly Disagree (-2)  
Weighted Average

and Parent Responses



**Secondary Parents**

Home learning - completed by parents Yrs 7-12 of those students who have been learning from home  
Weighted Average



Responses were then coded through reading and re-reading the transcribed responses. A number of sub-themes were identified within each of the three main themes. These themes, sub-themes and frequency of occurrences are illustrated in Figure 5.

## Theme 1: Most Challenging Aspects of Home Learning:

Of the 186 participants, 172 responded to the question: “What have you found to be most challenging in your learning at home experience?” These responses were coded into 10 sub-themes as shown in Figure 4. Of these sub-themes, the most common was Engagement and Motivation, with 63 responses. Students described the difficulty they had with maintaining their focus as the lockdown continued. “Although the teachers are still teaching the content well, I’m finding it harder to have debates and engage with the content. It’s also harder to ask questions if need be”. A senior student, while recognising the importance of study, commented; “It is increasingly hard to be motivated to continue doing homework or working during my free periods as I don’t have the same separation of space that I previously had and hence find that I get more distracted, and I am less productive when studying/doing homework”. A connection was made also between screen time and engagement by a junior student. “Paying attention and being engaged can get quite hard when you are staring at a screen for long periods of time.” One student commented that, following the online Preliminary Examinations, it was “difficult to gather the motivation to study and do homework, especially after the exams.”

Following on from engagement and motivation, students reported the loss of social connection as a significant challenge. “Not seeing friends and teachers in person to have social interactions outside of learning.”, “not being able to see my friends and teachers is extra hard as well as not seeing the peers inside school that u don’t hang around outside of school”, “Mostly I have just craved the interactions with other students and teachers”. “Being unable to have face to face contact with my classmates, teachers, and other smiling faces. That was the thing I used to look forward to every day.”

21 responses referred to the quantity of screen time and the impact that was having. Some students did find the largely synchronous nature of the learning at home model challenging in this regard. “Sitting in front of the computer all day in one room is difficult”. “Spending all day looking at a screen makes me feel lazy and tired, gives me the worst headaches by the end of the day, incredibly hard to focus, lots of distractions at home”. “I found that I was constantly looking at a screen which is affecting my eyesight however when I have off-screen time it is fine”. “During the

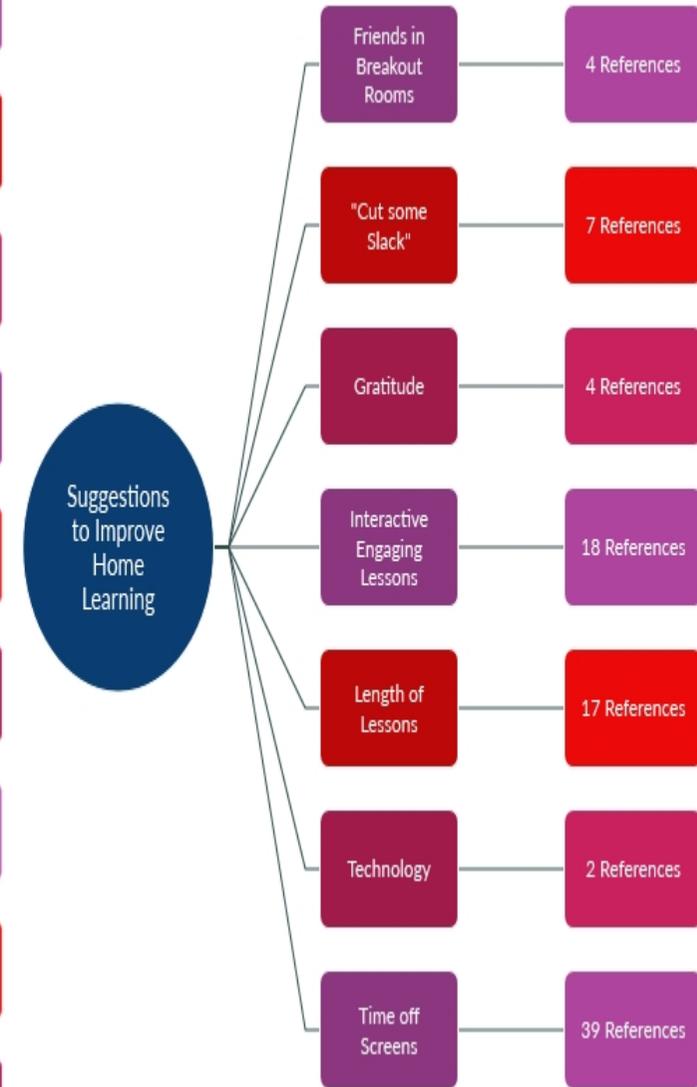
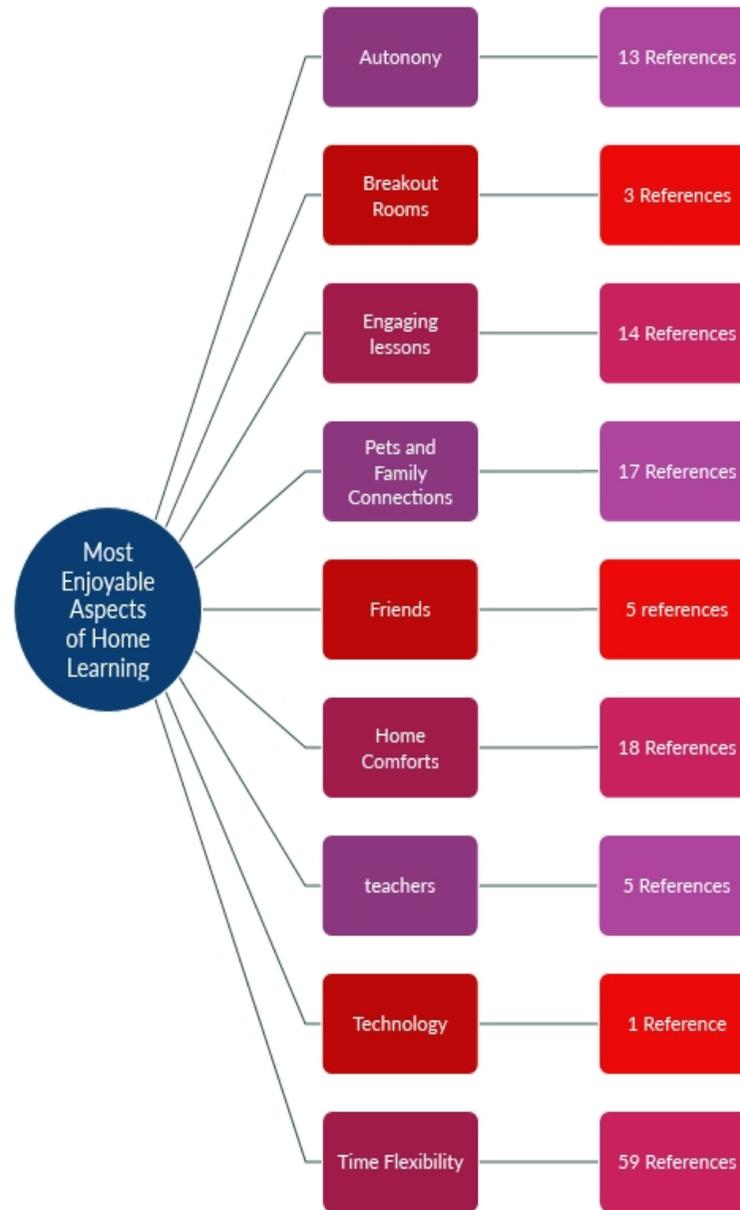
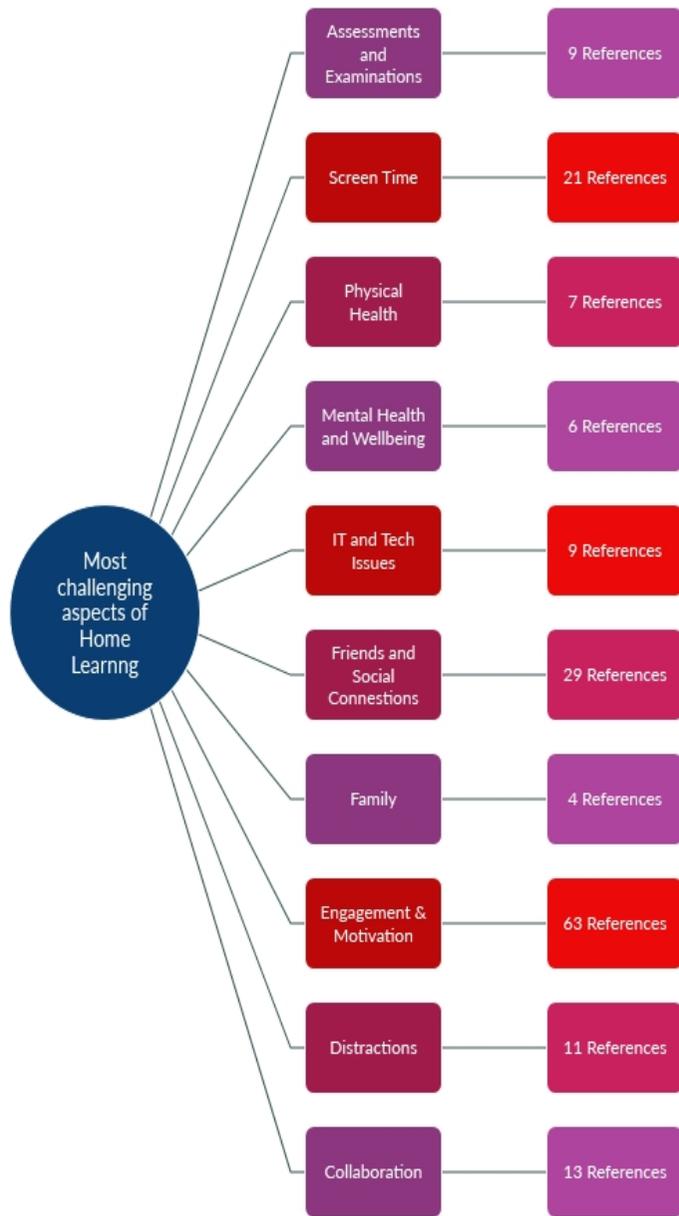


Figure 5: Themes and Sub-themes – Free Text Questions

later weeks I have been feeling very tired due to the amount of screen time. Therefore, I have not been able to properly engage with all of my classes”. A number of students also complained of headaches, which they put down to excessive screen time. “Trying to not get screen fatigue and getting headaches by looking at the screen all the time”. “I often get headaches and become quite exhausted by the end of the day”.

Within the lessons themselves, some students reported missing the opportunity to collaborate and participate in discussion with peers. “Not being able to discuss work with friends in class”. “I prefer discussing and problem-solving during class with friends”. Despite the use of the Teams platform that now enables options including whole class or small group scenarios, the online context did not suit all the students. “Connecting and communicating with others has been the hardest. I found starting conversations in break out rooms to be intimidating along with answering questions in the general meeting.”

Students also discussed the multitude of distractions available to them at home. “There are multiple distractions which attract my attention within my house setting”. “It is also very difficult to concentrate during online lessons and I often get distracted”. In some homes with parents working from home and siblings also learning at home, the distractions during classes were amplified; “It was hard to stay focused in class because of the noises and distractions in my house.” There is no doubt that Year 12 students are feeling the disappointment of potentially missing major celebrations in their schooling, lamenting that they may be “missing big milestones in the year 12 experience and being expected to just move on”.

## Theme 2: Most Enjoyable Aspects of Home Learning

153 students responded to the question: “What have you found to be most rewarding and/or enjoyable in your home learning experience? The most positive responses related to a newfound sense of autonomy and flexibility. Many students reported that they had a significant increase in time available to them as a result of not having to commute to and from school each day. “I have had more time to work on my assessments, and also not having to catch the bus to/from school which gives me a lot more free time”. “Spending more time with family, more time to relax (when I would usually be travelling to/from school)“. Several students alluded to the extra sleep time that was now available to them. “My sleep schedule has been much better because I haven't had to wake up as early, so I've been much more awake during the day than I normally would be at school”. Saving on time in commuting was also reported to have “allowed for some extra physical activity at the end of

the day.” Some students struggled to find any rewarding or enjoyable outcomes of learning at home. As one student remarked, a positive consequence of learning at home was “not having to catch the bus to school. This is the only positive aspect that comes to mind”.

The sense of autonomy reported by some of the students may have acted to maintain motivation, in line with the self-determination theory (SDT) of human motivation, developed by Deci and Ryan (Deci et al., 1991; Ryan & Deci, 2000). SDT describes our drive to satisfy our three basic psychological needs for autonomy, competence and relatedness, prerequisites for flourishing. Comments such as “being able to complete work from different classes, e.g., if I’ve finished my work for history I’ll do my math homework.”, “Being able to focus on things I want to a bit more”, “Being able to work at my own pace in some ways and I’m better at setting goals for the day” and “Learning in the comfort of my own home without needing to wake up early and travel to and from school. I was in charge of my own learning. When I needed to go to the bathroom or eat I didn't need permission” reflect the agency and control that a number of students experienced as positive outcomes of at home learning.

The second of the three needs described by the self-determination theory of motivation, that is competence, was experienced and reported by students, some of whom reflected that their learning had not regressed and, in some cases, may have been enhanced through learning at home. One student reported “receiving good marks on an assessment. Better marks than I would receive in-person learning, weirdly”. Similarly, while overall students reported a decrease in engagement, this was not the universal experience with one student, for example, contemplating “I found that my engagement in class discussions and contributions to class have stayed the same, and not worsened. If anything, it may have improved?”

Students recognised the efforts of their teachers to create and provide engaging learning experiences, reflecting on “teachers making the lessons more fun and engaging, recognising the exhaustion and tiredness experienced by everyone, teacher included”. They appreciated “the interactive and engaging lessons” and “being able to actually learn from home instead of not learning”. Students expressed their appreciation and gratitude towards their teachers also, with comments such as “Watching some of my teachers smile even if we just engage once in their lessons, I love my teachers :)” and “teachers clearly put a lot of effort into the lessons which is greatly appreciated.”

Across all the years, 7 to 12, a number of students also appreciated the extra time they were able to spend with their families. They enjoyed “morning/afternoon exercise with family and siblings such as walking the dog and afternoon badminton with a cheap K-Mart net and racquets”. Pets and

family were a source of relatedness and wellbeing. “I spend more time with my pet and family, and I get to go outside a lot to play” and “I can hang out with my two dogs between classes”.

The third of the basic psychological needs described through SDT, relatedness, the need to be part of a group, to be social beings, was potentially the most difficult to satisfy during learning from home as indicated earlier in the challenges identified. Through the implementation of the Microsoft Teams platform, however, students did appreciate the use by some of their teachers of the Breakout Rooms feature, describing the most enjoyable aspect of home learning as being allocated to “breakout rooms with friends”, “getting to have some fun with free time in breakout rooms occasionally”, and “the most enjoyable task in home learning is the ability to interact with peers and friends in break-out rooms”.

The great majority of students who responded to the survey, 153 out of a total 286, over 80%, were able to identify some advantageous aspects of learning from home during school closure. This despite their evident indications as described in the earlier sections of this report that their strong preference is to be learning face-to-face at school. This optimistic style is reflective of the findings reported earlier by Waters (2021) that these students did experience stress-related growth during at home learning.

### Theme 3: Suggestions to Improve Home Learning

Having reflected upon the greatest challenges and most enjoyable experiences of learning at home, students were then invited to suggest improvements to the continuity of learning model that the school has in place. 91 responses were coded related to suggestions for improvement, with 39 of these (about 40%) related to reducing screen time and 17 (about 20%) related to the length of online lessons. Typical of the comments made were suggestions for “less lesson time, increased amount of break time between lessons and more interaction with classmates”, One student reflected that “online lessons (although they go for the same amount of time) are so much longer. You don’t have the freedom to talk to your friend beside you or have the first 5 mins when the teacher is a little late”. In a suggestion that asynchronous teaching and learning becomes more of a feature of the online learning model, comments included to “find more ways to incorporate offline lesson time”, “more activities offline, or making the afternoon off after assembly more regular”, “less time spent on screens and more independent learning”, and “having more activities to do away from the computer”. A number of similar comments were made suggesting the move to teaching online meant that “some teachers need to provide more interactive lessons - especially lessons that allow us to go off of our screens and do things around the house. I also think it would be better if we had allocated brain

breaks because some lessons I do not get a brain break and it decreases the productivity of my lessons and leaves me more tired at the end of the day”.

It was clear through the responses to all questions that some students have struggled with the move to learning at home. The literature shows that, in all probability, any loss in learning will be minimal and temporary. This contention is supported through the conclusions of Waters’ study (Waters, Allen, et al., 2021) indicating the levels of stress-related growth experienced by the students following the 2020 remote learning experience. In the current situation, as one senior student commented, their experience might benefit from “a wider variety of activities if possible and just cutting students some slack. I felt as if I was expected to perform to the same degree as if in person and that's just not going to happen. Because I couldn't achieve those standards it made it hard to feel motivated.” As a junior student stated, they just need teachers to “understand that we are really trying and really struggling”. Perhaps teachers need to stress less about the progress their students are making and rather celebrate their (teachers and students) successes.

Comments were made also demonstrating gratitude and appreciation. “I think the changes that were made [since the 2020 school closures] have been really good, like letting us turn our cameras on and using break out rooms. I appreciate everyone who has been working hard to make online learning as smooth and engaging as possible. :)”, “I am so grateful for everything the school is doing”, and the succinct but powerful statement, “it’s terrible, but the school is doing all they can”.

## Discussion:

Of the twelve items responded to in Section 1, the weighted averages show overall positive results for only two: “My teachers have been able to design interesting and engaging lessons for us while we have been learning from home” and “I have had access to the technology I need to engage in learning from home”. It would, however, be a mistake to dichotomise these results. Figure 2 (p.11) reveals the distribution of responses across the 5-scale options resulting in the weighted averages illustrated in Figure 3. Student responses are very much on a continuum and undoubtedly no two students (or teachers or parents) have had an identical experience through the period of school shutdowns and learning remotely at home. While some have little concern for negative impacts on their academic or social-emotional wellbeing, others have felt the challenge and adversity at differing levels. 12% of students, for example, have reported that learning from home has had a positive impact on their social-emotional wellbeing. 23% have, overall, enjoyed the experience of learning from home. Though 45% of students are concerned by the potential long-term impact on their academic growth, 29% are undecided and 26% are not concerned. These concerns need to be

considered in light of Waters' findings (2021) referred to earlier, of positive stress-related growth for this cohort of students following the 2020 shutdown, and the protective factors she has identified.

Challenges experienced and reported by the students have ranged from issues of physical and mental health and wellbeing, family, friends, social connections, engagement, and motivation. Benefits include a heightened experience of agency and autonomy, strengthened family connections ensuring relatedness, fewer constraints on time, enjoying the comforts of home, participation in engaging lessons leading to a sense of competence, and appreciation and gratitude for the efforts of teachers.

Students displayed altruistic behaviours such as gratitude for the efforts of their teachers in preparing engaging and interesting lessons, and reported that, for many, one of the enjoyable aspects of learning at home was the opportunity to spend time with family. These behaviours, gratitude, engagement and strong relationships, are identified as protective factors against the effects of anxiety and depression during the pandemic (Branje & Morris, 2021). The responses of parents also indicate a level of gratitude and appreciation for the support their children have received from their teachers, enhancing the level of trust between parents and teachers described by Kim and Asbury (2020).

During the crisis that is a global pandemic, "it is understandable that research is heavily directed towards addressing the ways in which people are wounded and weakened. However, this need not come at the expense of also investigating the ways in which people are sustained and strengthened" (Waters, Algoe, et al., 2021, p. 1). Optimism can be learned vicariously, through others, and through experiences of efficacy in times of challenge (Peterson, 2000; Seligman, 2018). Resilience requires encountering and overcoming adversity (Masten, 2001; Reivich et al., 2013). Personal growth requires us to confront and surmount optimal challenge (Abuhamdeh & Csikszentmihalyi, 2011; Csikszentmihalyi, 2013).

Digital technologies have provided the platform for remote learning; however, it has been a human endeavour. Whilst many were able to maintain healthy levels of motivation and engagement, we recognise that our students have, at times, struggled to flourish during school closures, social isolation, and remote learning. Through their perseverance, and with the support of their teachers and families, they have been able to overcome the challenges and adversity they have faced. As schools gradually transition back, we celebrate our students' increasing optimism, resilience, and growth.

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